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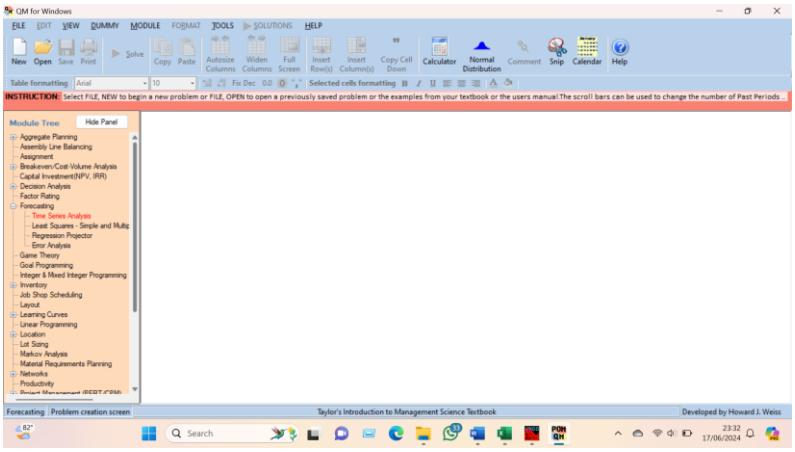
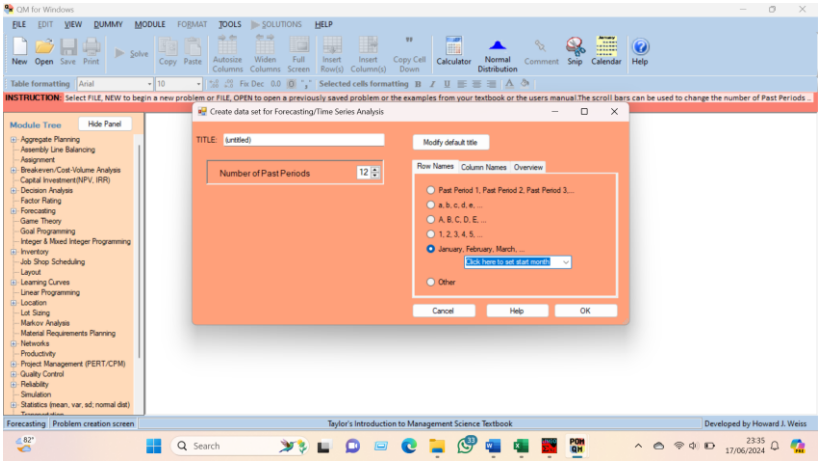
LAMPIRAN

LAMPIRAN A Langkah-langkah peramalan (*forecasting*) menggunakan software POM-QM

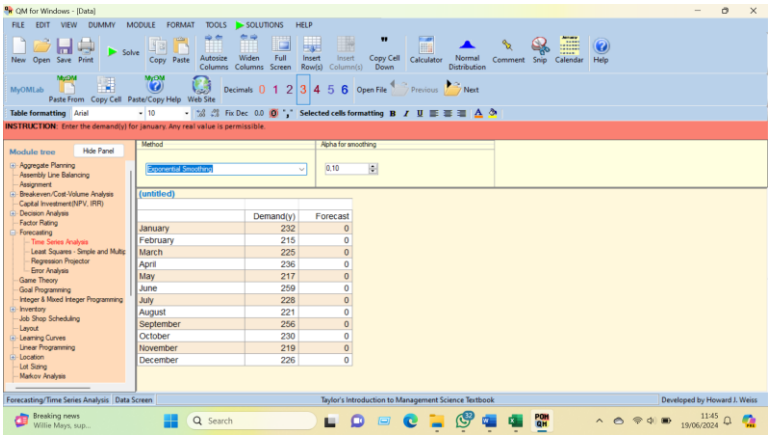
1. Open *software* POM-QM, kemudian klik *forecasting* lalu klik *Time Series Ananlysis.* Muncul tampilan dibawah ini.



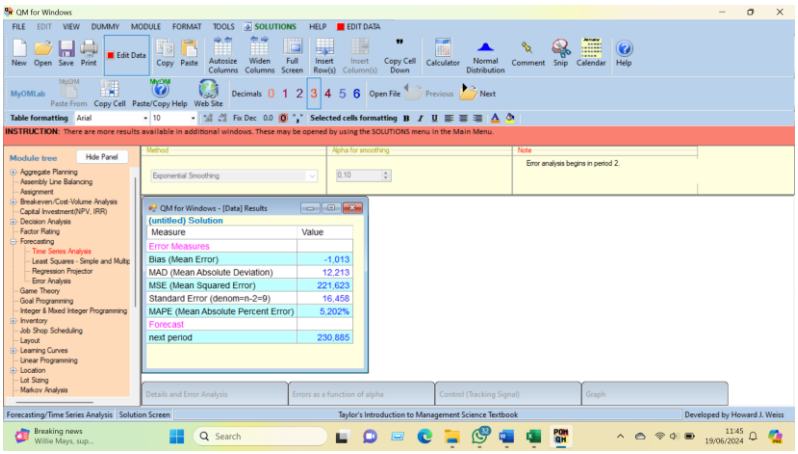
2. Selanjutnya klik number of periods, pilih yang 12 periode/ bulan lalu klik OK.

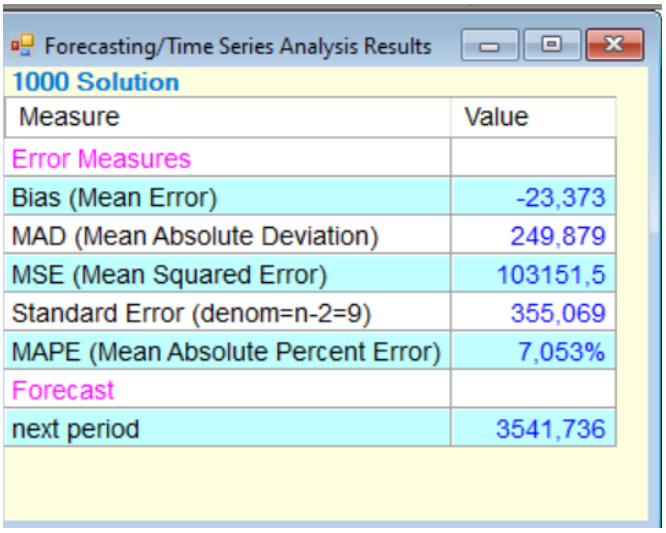


3. Langkah selanjutnya ketik demand dan pilih metode analisisnya, disini menggunakan *exponential smoothing* karena data bervariasi disekitar nilai rata-rata yang konsisten kemudian klik *solve*.

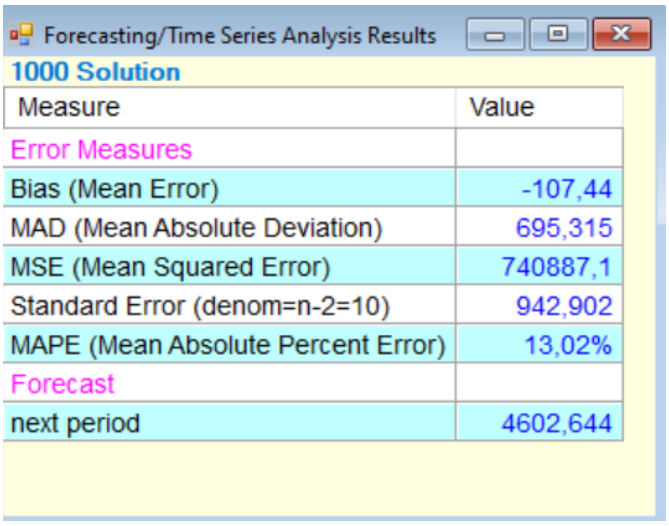


4. Kemudian muncul nilai MAD, MSE dan MAPE. Setelah diketahui nilainya maka cari nilai yang terkecil untuk mengetahui nilai parameter yang terbaik.

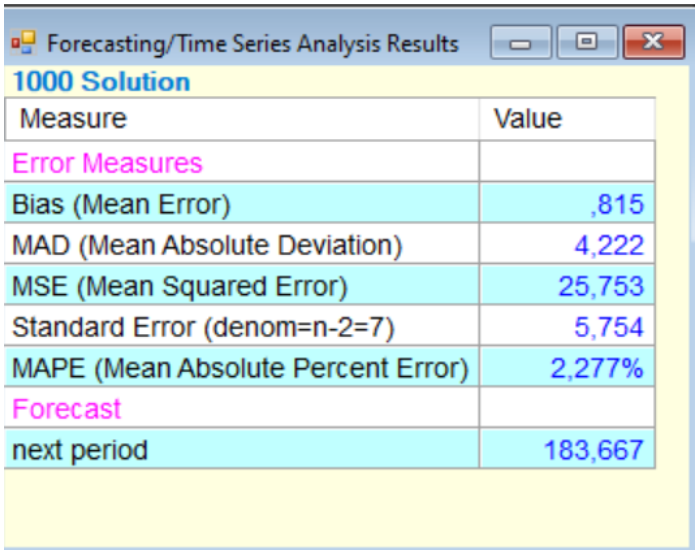




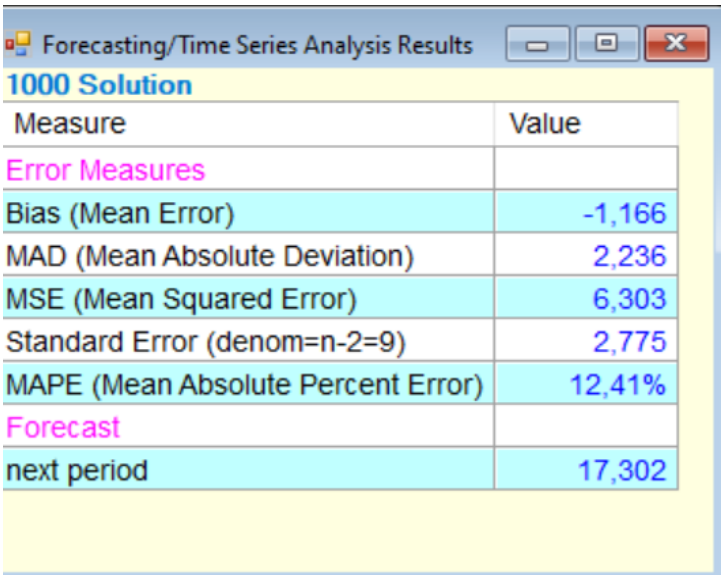
Lampiran 1 Time series Meja siswa



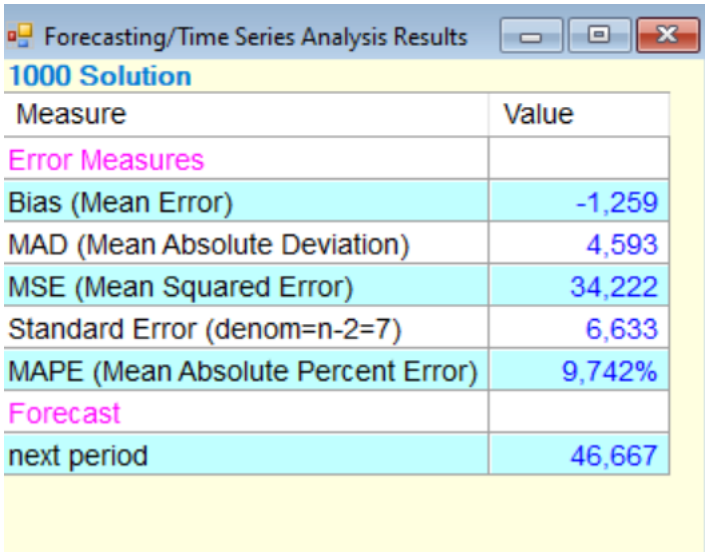
Lampiran 2 Time series kursi siswa



Lampiran 3 Time series lemari

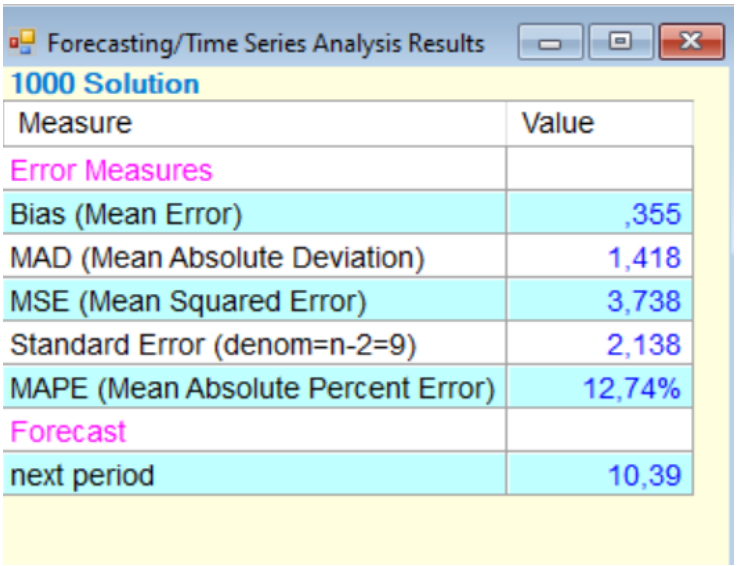


Lampiran 4 Meja makan



Measure	Value
Error Measures	
Bias (Mean Error)	-1,259
MAD (Mean Absolute Deviation)	4,593
MSE (Mean Squared Error)	34,222
Standard Error (denom=n-2=7)	6,633
MAPE (Mean Absolute Percent Error)	9,742%
Forecast	
next period	46,667

Lampiran 5 meja kerangka



Measure	Value
Error Measures	
Bias (Mean Error)	,355
MAD (Mean Absolute Deviation)	1,418
MSE (Mean Squared Error)	3,738
Standard Error (denom=n-2=9)	2,138
MAPE (Mean Absolute Percent Error)	12,74%
Forecast	
next period	10,39

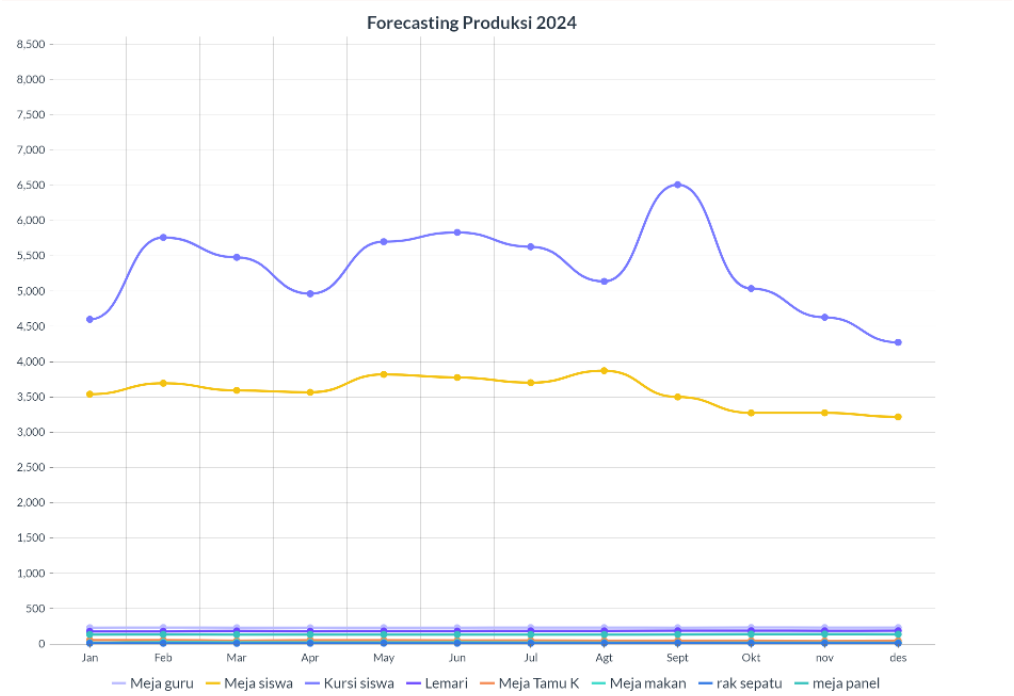
Lampiran 6 Rak sepatu

Forecasting/Time Series Analysis Results

1000 Solution

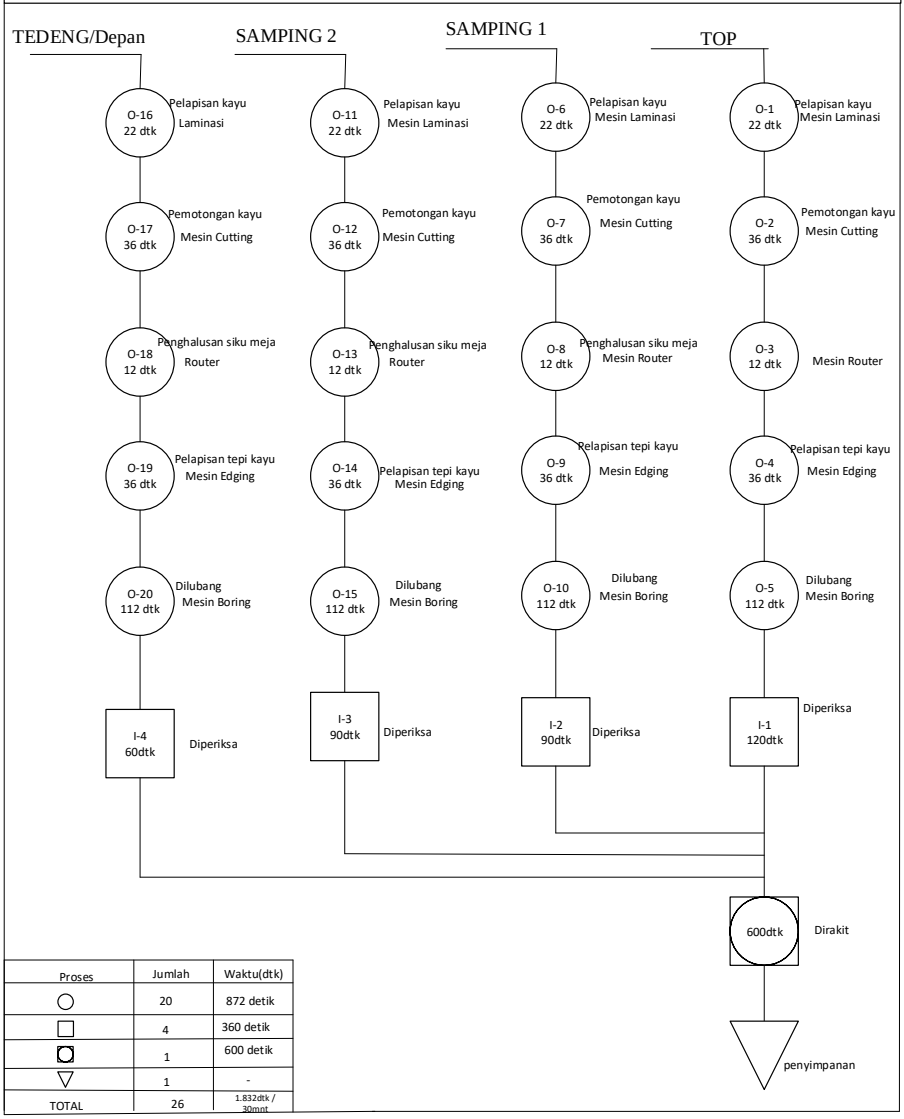
Measure	Value
Error Measures	
Bias (Mean Error)	-,771
MAD (Mean Absolute Deviation)	12,344
MSE (Mean Squared Error)	242,986
Standard Error (denom=n-2=9)	17,233
MAPE (Mean Absolute Percent Error)	9,322%
Forecast	
next period	134,152

Lampiran 7 Meja panel



PETA PROSES OPERASI

Nama Obyek : MEJA GURU
Nomor Peta : 01
Dipetakan oleh : Ade Luthfiani
Tanggal dipetakan : 20-06-2024

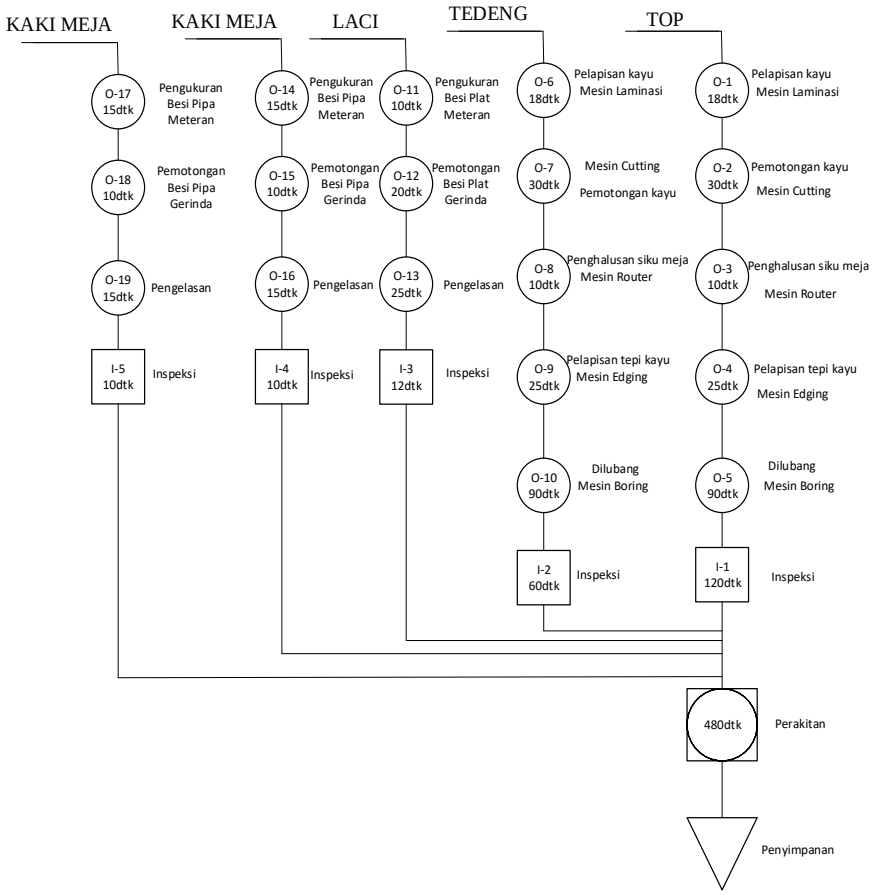


Proses	Jumlah	Waktu(dtk)
○	20	872 detik
□	4	360 detik
⬡	1	600 detik
▽	1	-
TOTAL	26	1.832dtk / 30mnt

Lampiran 8 Peta proses operasi meja guru

PETA PROSES OPERASI

NAMA OBYEK : MEJA SISWA
NO.PETA : 02
DIPETAKAN OLEH : Ade Luthfiani
TGL DIPETAKAN : 20-06-2024

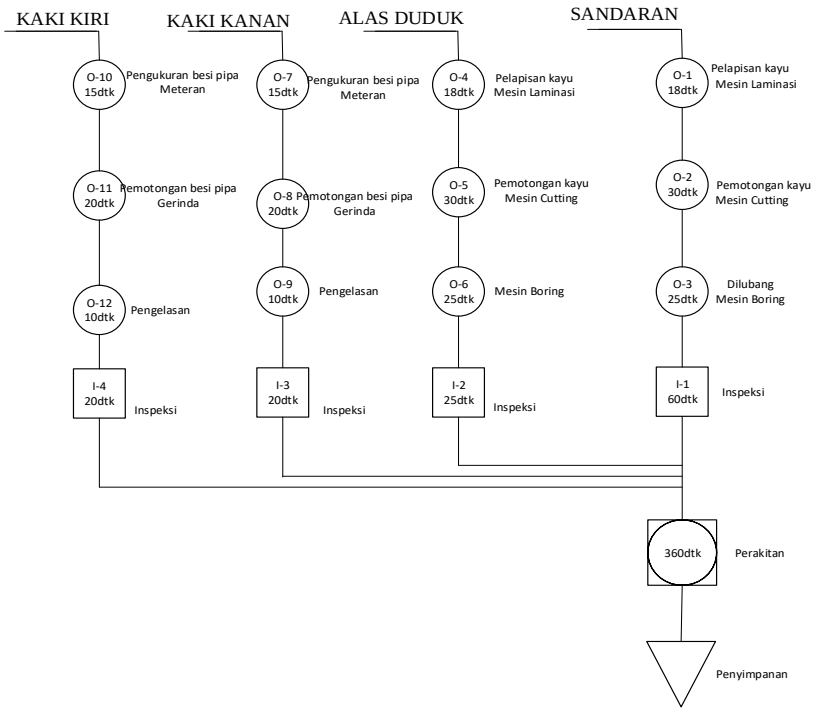


	Jumlah	Waktu(dtk)
○	20	481
□	4	212
◎	1	480
▽	1	-
	26	1.173 dtk/ 20mnt

Lampiran 9 Peta proses operasi Meja siswa

PETA PROSES OPERASI

Nama Obyek : KURSI SISWA
Nomor Peta : 03
Dipetakan Oleh : Ade Luthfiani
Tanggal Dipetakan : 20-06-2024

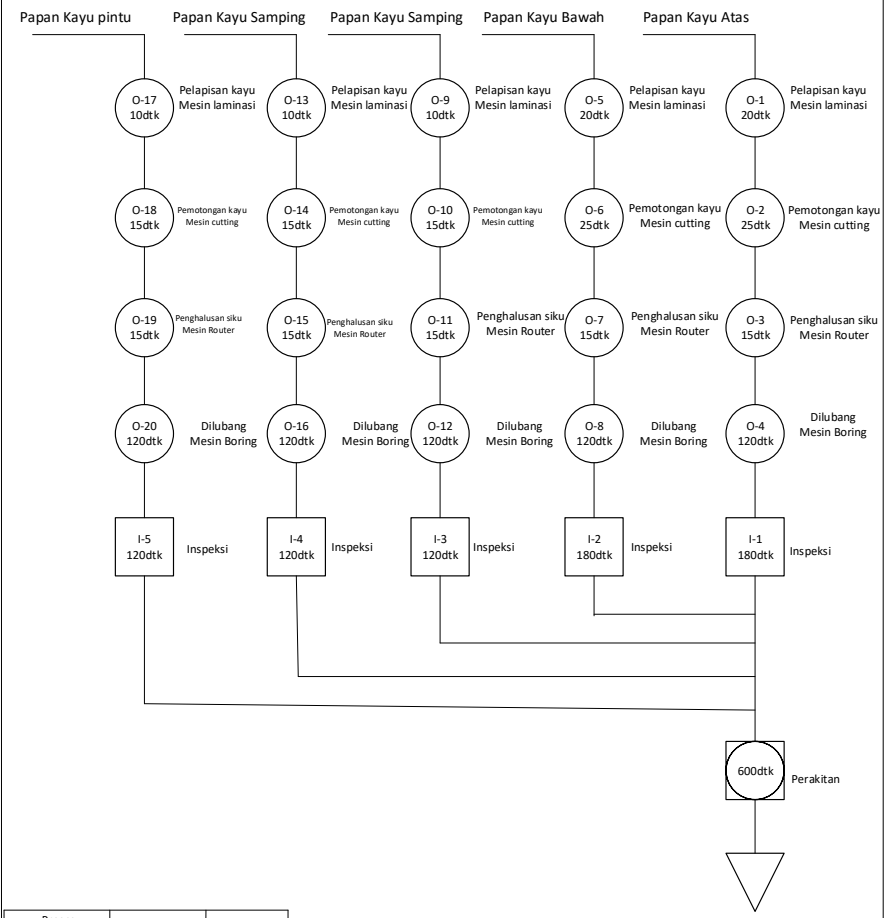


	Jumlah	Waktu(dtk)
○	12	236
□	4	125
◎	1	360
▽	1	-
TOTAL	18	721 dtk/12 mnt

Lampiran 10 Peta proses operasi Kursi siswa

PETA PROSES OPERASI

Nama Obyek : **Lemari Dinding**
Nomor peta : **04**
Dipetakan oleh : **Ade Luthfiani**
Tanggal dipetakan : **30-06-2024**

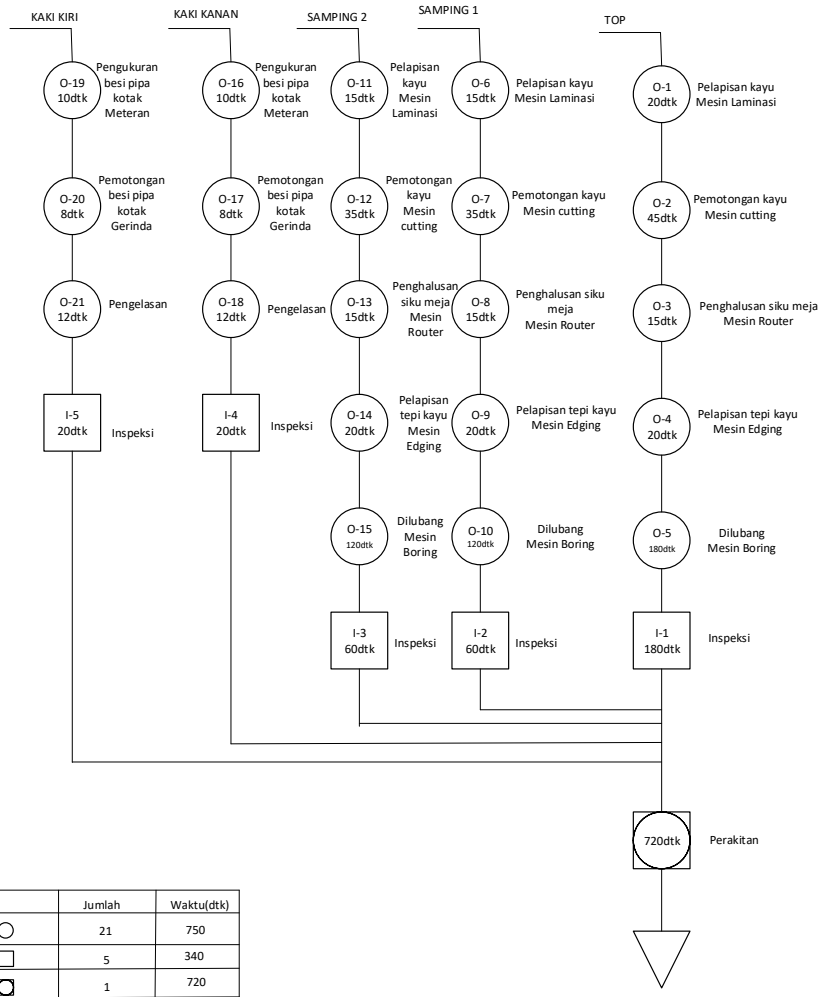


Proses	Jumlah	Waktu(dtk)
○	20	840
□	5	720
◎	1	600
▽	1	-
TOTAL	27	2.120dtk/35menit

Lampiran 11 Peta proses operasi Lemari dinding

PETA PROSES OPERASI

Nama Obyek : **Meja Tamu Kerangka**
Nomor Peta : **05**
Dipetakan Oleh : **Ade Luthfiani**
Tanggal dipetakan : **30-06-2024**

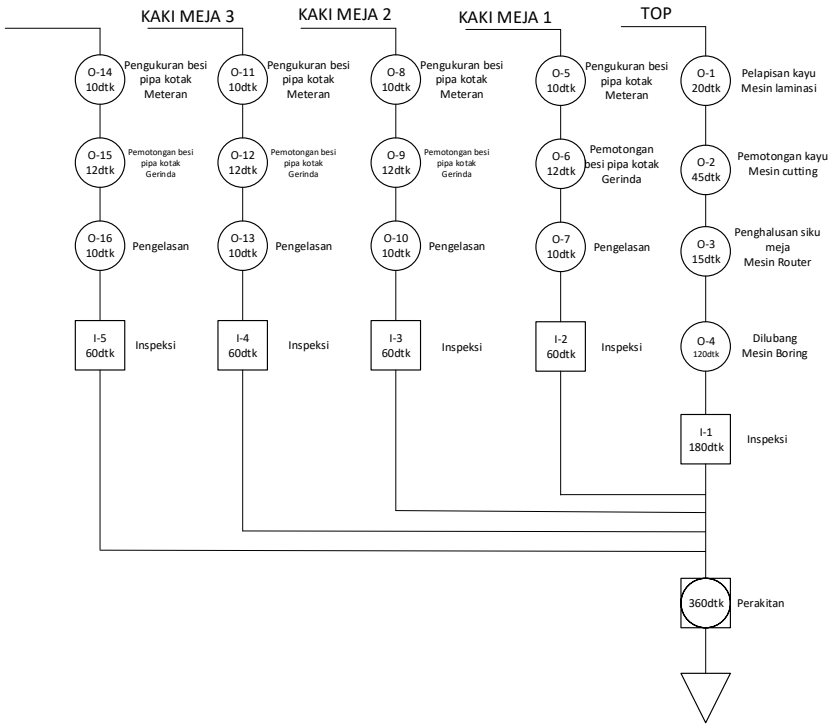


	Jumlah	Waktu(dtk)
○	21	750
□	5	340
⬡	1	720
▽	1	-
TOTAL	28	1.810 dtk/30 mnt

Lampiran 12 Peta proses operasi Meja tamu kerangka

PETA PROSES PERASI

Nama Obyek : Meja Makan
Nomor Peta : 06
Dipetakan oleh : Ade Luthfiani
Tanggal dipetakan : 30-06-2024

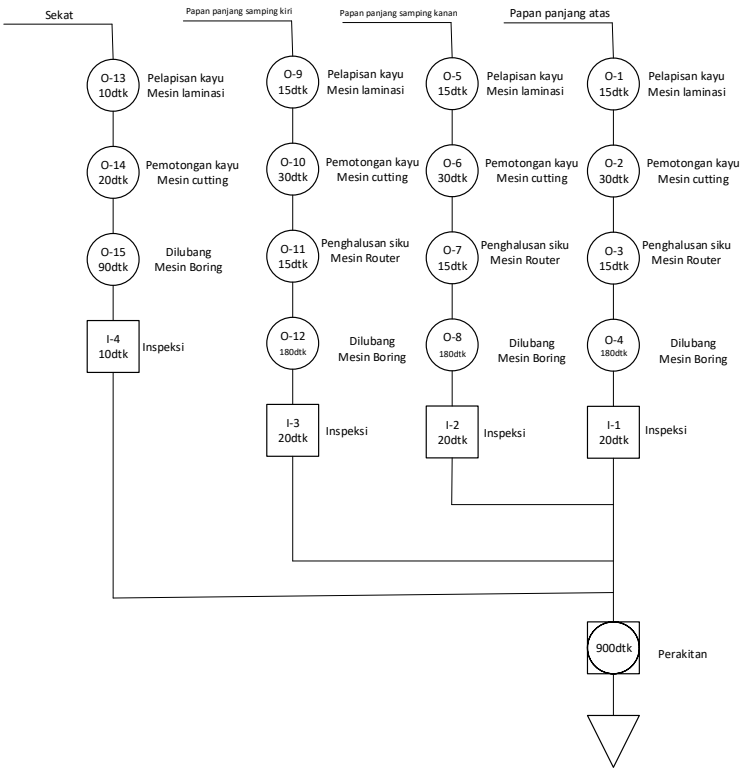


PROSES	Jumlah	Waktu(dtk)
○	16	328
□	5	420
⬡	1	360
▽	1	-
TOTAL	23	1.108dtk/18 menit

Lampiran 13 Peta proses operasi Meja makan

PETA PROSES OPERASI

Nama Obyek : Rak sepatu
Nomor Peta : 07
Dipetakan Oleh : Ade Luthfiani
Tanggal Dipetakan : 30-06-2024

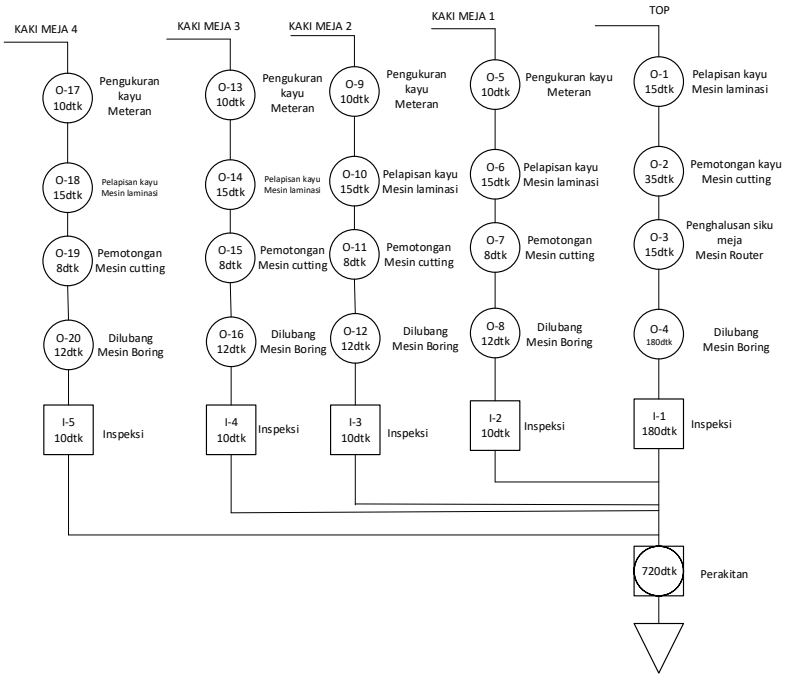


Proses	Jumlah	Waktu(dtk)
○	15	850
□	4	70
⬡	1	900
▽	1	-
Total	21	1.820dtk/30 menit

Lampiran 14 Peta proses operasi Rak sepatu

PETA PROSES OPERASI

Nama Obyek : Meja Tamu Panel
Nomor Peta : 08
Dipetakan Oleh : Ade Luthfiani
Tanggal Dipetakan : 30-06-2024

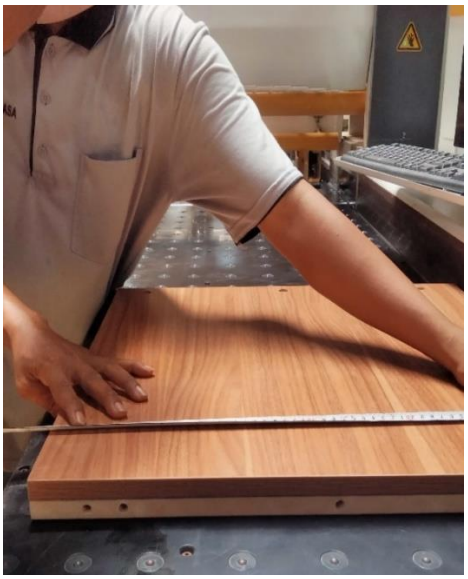


Proses	Jumlah	Waktu(dtk)
○	20	425
□	4	220
◎	1	720
▽	1	-
Total	26	1.365 dtk/ 23mnt

Lampiran 15 Peta proses operasi Meja tamu panel

LAMPIRAN C Proses Produksi

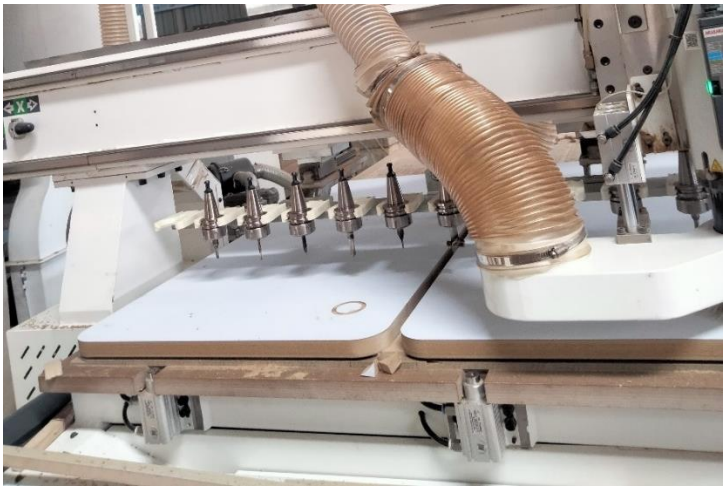
Lampiran 16 Proses Laminasi



Lampiran 17 Pengukuran

Lampiran 18 Pemotongan

Lampiran 19 Pelapisan tepi kayu



Lampiran 20 dilubang/ bor

Lampiran 21 Meja siswa

Lampiran 22 Kursi siswa

Lampiran 23 Meja guru

Lampiran 24 Meja kerangka

Lampiran 25 Lemari gantung

Lampiran 26 Meja makan

Lampiran 27 Meja tamu panel


JALUR
EVAKUASI

LAMPIRAN C Input Model Formulasi Matematis

INPUT BULAN JANUARI 2024

```
!fungsi tujuan;
min = 0.5*
(d11+d12+d13+d14+d15+d16+d17+d18+d19+d20+d21+d22+d23+d24+d25+d26)+
0.3*(d32)+0.2*(d42);
!variabel keputusan;
x1+d11-d12=230;
x2+d13-d14=3541;
x3+d15-d16=4602;
x4+d17-d18=179;
x5+d19-d20=56;
x6+d21-d22=17;
x7+d23-d24=10;
x8+d25-d26=134;
!fungsi kendala/sasaran;
2375000*x1 + 645500*x2 + 508000*x3 + 3350000*x4+ 2495000*x5 +
1830000*x6 + 2225000*x7 + 1275000*x8 + d31 - d32 = b1;
!keuntungan produksi;
1337500*x1 + 372500*x2 + 279000*x3 + 2025000*x4 + 1247000*x5 +
915000*x6 + 1162500*x7 + 637500*x8 + d41 - d42 = c1;
!pembatas non negatif;
x1>=0;
x2>=0;
x3>=0;
x4>=0;
x5>=0;
x6>=0;
x7>=0;
x8>=0;
d11>=0;
d12>=0;
d13>=0;
d14>=0;
d15>=0;
d16>=0;
d17>=0;
d18>=0;
d19>=0;
d20>=0;
d21>=0;
d22>=0;
d23>=0;
d24>=0;
d25>=0;
d26>=0; end
```

OUTPUT BULAN JANUARI 2024

```
  Global optimal solution found.
  Objective value:                              0.000000
  Infeasibilities:                              0.000000
  Total solver iterations:                             0
  Elapsed runtime seconds:                          0.10

  Model Class:                                        LP

  Total variables:                    30
  Nonlinear variables:                 0
  Integer variables:                   0

  Total constraints:                  35
  Nonlinear constraints:               0

  Total nonzeros:                     88
  Nonlinear nonzeros:                  0


                           Variable           Value
Reduced Cost
                                D11        0.000000
0.5000000
                                D12        0.000000
0.5000000
                                D13        0.000000
0.5000000
                                D14        0.000000
0.5000000
                                D15        0.000000
0.5000000
                                D16        0.000000
0.5000000
                                D17        0.000000
0.5000000
                                D18        0.000000
0.5000000
                                D19        0.000000
0.5000000
                                D20        0.000000
0.5000000
                                D21        0.000000
0.5000000
                                D22        0.000000
0.5000000
                                D23        0.000000
0.5000000
                                D24        0.000000
0.5000000
                                D25        0.000000
0.5000000
                                D26        0.000000
0.5000000
```

D32	0.000000
D42	0.000000
X1	230.0000
X2	3541.000
X3	4602.000
X4	179.0000
X5	56.00000
X6	17.00000
X7	10.00000
X8	134.0000
D31	0.000000
B1	0.6133362E+10
D41	0.000000
C1	0.3455518E+10

Row	Slack or Surplus
1	0.000000
2	0.000000
3	0.000000
4	0.000000
5	0.000000
6	0.000000
7	0.000000
8	0.000000
9	0.000000
10	0.000000
11	0.000000
12	230.0000

Dual Price
0.3000000
0.2000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
-1.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000

	13 3541.000
0.000000	
	14 4602.000
0.000000	
	15 179.0000
0.000000	
	16 56.00000
0.000000	
	17 17.00000
0.000000	
	18 10.00000
0.000000	
	19 134.0000
0.000000	
	20 0.000000
0.000000	
	21 0.000000
0.000000	
	22 0.000000
0.000000	
	23 0.000000
0.000000	
	24 0.000000
0.000000	
	25 0.000000
0.000000	
	26 0.000000
0.000000	
	27 0.000000
0.000000	
	28 0.000000
0.000000	
	29 0.000000
0.000000	
	30 0.000000
0.000000	
	31 0.000000
0.000000	
	32 0.000000
0.000000	
	33 0.000000
0.000000	
	34 0.000000
0.000000	
	35 0.000000
0.000000	

INPUT BULAN FEBRUARI 2024

```
!fungsi tujuan;
min = 0.5*
(d11+d12+d13+d14+d15+d16+d17+d18+d19+d20+d21+d22+d23+d24+d25+d26)+
0.3*(d32)+0.2*(d42);
!variabel keputusan;
x1+d11-d12=232;
x2+d13-d14=3696;
x3+d15-d16=5763;
x4+d17-d18=179;
x5+d19-d20=56;
x6+d21-d22=25;
x7+d23-d24=10;
x8+d25-d26=135;
!fungsi kendala/sasaran;
2375000*x1 + 645500*x2 + 508000*x3 + 3350000*x4+ 2495000*x5 +
1830000*x6 + 2225000*x7 + 1275000*x8 + d31 - d32 = b1;
!keuntungan produksi;
1337500*x1 + 372500*x2 + 279000*x3 + 2025000*x4 + 1247000*x5 +
915000*x6 + 1162500*x7 + 637500*x8 + d41 - d42 = c1;
!pembatas non negatif;
x1>=0;
x2>=0;
x3>=0;
x4>=0;
x5>=0;
x6>=0;
x7>=0;
x8>=0;
d11>=0;
d12>=0;
d13>=0;
d14>=0;
d15>=0;
d16>=0;
d17>=0;
d18>=0;
d19>=0;
d20>=0;
d21>=0;
d22>=0;
d23>=0;
d24>=0;
d25>=0;
d26>=0; end
```

OUTPUT BULAN FEBRUARI 2024

```
 Global optimal solution found.
 Objective value:                              0.000000
 Infeasibilities:                              0.000000
 Total solver iterations:                             0
 Elapsed runtime seconds:                          0.14

 Model Class:                                        LP

 Total variables:                    30
 Nonlinear variables:                 0
 Integer variables:                   0

 Total constraints:                  35
 Nonlinear constraints:               0

 Total nonzeros:                     88
 Nonlinear nonzeros:                  0


                             Variable           Value
Reduced Cost
                                  D11        0.000000
0.5000000
                                  D12        0.000000
0.5000000
                                  D13        0.000000
0.5000000
                                  D14        0.000000
0.5000000
                                  D15        0.000000
0.5000000
                                  D16        0.000000
0.5000000
                                  D17        0.000000
0.5000000
                                  D18        0.000000
0.5000000
                                  D19        0.000000
0.5000000
                                  D20        0.000000
0.5000000
                                  D21        0.000000
0.5000000
                                  D22        0.000000
0.5000000
                                  D23        0.000000
0.5000000
                                  D24        0.000000
0.5000000
                                  D25        0.000000
0.5000000
                                  D26        0.000000
0.5000000
```

	0.3000000
	0.2000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000

Dual Price
-1.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000

D32	0.000000
D42	0.000000
X1	232.0000
X2	3696.000
X3	5763.000
X4	179.0000
X5	56.00000
X6	25.00000
X7	10.00000
X8	135.0000
D31	0.000000
B1	0.6843867E+10
D41	0.000000
C1	0.3847806E+10

Row	Slack or Surplus
1	0.000000
2	0.000000
3	0.000000
4	0.000000
5	0.000000
6	0.000000
7	0.000000
8	0.000000
9	0.000000
10	0.000000
11	0.000000
12	232.0000

	13 3696.000
0.000000	14 5763.000
0.000000	15 179.0000
0.000000	16 56.00000
0.000000	17 25.00000
0.000000	18 10.00000
0.000000	19 135.0000
0.000000	20 0.000000
0.000000	21 0.000000
0.000000	22 0.000000
0.000000	23 0.000000
0.000000	24 0.000000
0.000000	25 0.000000
0.000000	26 0.000000
0.000000	27 0.000000
0.000000	28 0.000000
0.000000	29 0.000000
0.000000	30 0.000000
0.000000	31 0.000000
0.000000	32 0.000000
0.000000	33 0.000000
0.000000	34 0.000000
0.000000	35 0.000000
0.000000	

INPUT BULAN MARET 2024

```
!fungsi tujuan;
min = 0.5*
(d11+d12+d13+d14+d15+d16+d17+d18+d19+d20+d21+d22+d23+d24+d25+d26)+
0.3*(d32)+0.2*(d42);
!variabel keputusan;
x1+d11-d12=225;
x2+d13-d14=3550;
x3+d15-d16=4908;
x4+d17-d18=182;
x5+d19-d20=50;
x6+d21-d22=20;
x7+d23-d24=10;
x8+d25-d26=130;
!fungsi kendala/sasaran;
2375000*x1 + 645500*x2 + 508000*x3 + 3350000*x4+ 2495000*x5 +
1830000*x6 + 2225000*x7 + 1275000*x8 + d31 - d32 = b1;
!keuntungan produksi;
1337500*x1 + 372500*x2 + 279000*x3 + 2025000*x4 + 1247000*x5 +
915000*x6 + 1162500*x7 + 637500*x8 + d41 - d42 = c1;
!pembatas non negatif;
x1>=0;
x2>=0;
x3>=0;
x4>=0;
x5>=0;
x6>=0;
x7>=0;
x8>=0;
d11>=0;
d12>=0;
d13>=0;
d14>=0;
d15>=0;
d16>=0;
d17>=0;
d18>=0;
d19>=0;
d20>=0;
d21>=0;
d22>=0;
d23>=0;
d24>=0;
d25>=0;
d26>=0; end
```

OUTPUT BULAN MARET 2024

```
  Global optimal solution found.
  Objective value:                              0.000000
  Infeasibilities:                              0.000000
  Total solver iterations:                             0
  Elapsed runtime seconds:                          0.15

  Model Class:                                        LP

  Total variables:                    30
  Nonlinear variables:                 0
  Integer variables:                   0

  Total constraints:                  35
  Nonlinear constraints:               0

  Total nonzeros:                     88
  Nonlinear nonzeros:                  0


                            Variable           Value
Reduced Cost
                                 D11        0.000000
0.5000000
                                 D12        0.000000
0.5000000
                                 D13        0.000000
0.5000000
                                 D14        0.000000
0.5000000
                                 D15        0.000000
0.5000000
                                 D16        0.000000
0.5000000
                                 D17        0.000000
0.5000000
                                 D18        0.000000
0.5000000
                                 D19        0.000000
0.5000000
                                 D20        0.000000
0.5000000
                                 D21        0.000000
0.5000000
                                 D22        0.000000
0.5000000
                                 D23        0.000000
0.5000000
                                 D24        0.000000
0.5000000
                                 D25        0.000000
0.5000000
                                 D26        0.000000
0.5000000
```

	0.3000000
	0.2000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000

	Dual Price
	-1.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000

D32	0.000000
D42	0.000000
X1	225.0000
X2	3550.000
X3	4908.000
X4	182.0000
X5	50.00000
X6	20.00000
X7	10.00000
X8	130.0000
D31	0.000000
B1	0.6278214E+10
D41	0.000000
C1	0.3536344E+10

Row	Slack or Surplus
1	0.000000
2	0.000000
3	0.000000
4	0.000000
5	0.000000
6	0.000000
7	0.000000
8	0.000000
9	0.000000
10	0.000000
11	0.000000
12	225.0000

	13 3550.000
0.000000	14 4908.000
0.000000	15 182.0000
0.000000	16 50.00000
0.000000	17 20.00000
0.000000	18 10.00000
0.000000	19 130.0000
0.000000	20 0.000000
0.000000	21 0.000000
0.000000	22 0.000000
0.000000	23 0.000000
0.000000	24 0.000000
0.000000	25 0.000000
0.000000	26 0.000000
0.000000	27 0.000000
0.000000	28 0.000000
0.000000	29 0.000000
0.000000	30 0.000000
0.000000	31 0.000000
0.000000	32 0.000000
0.000000	33 0.000000
0.000000	34 0.000000
0.000000	35 0.000000
0.000000	

INPUT BULAN APRIL 2024

```
!fungsi tujuan;
min = 0.5*
(d11+d12+d13+d14+d15+d16+d17+d18+d19+d20+d21+d22+d23+d24+d25+d26)+
0.3*(d32)+0.2*(d42);
!variabel keputusan;
x1+d11-d12=230;
x2+d13-d14=3595;
x3+d15-d16=5481;
x4+d17-d18=184;
x5+d19-d20=47;
x6+d21-d22=24;
x7+d23-d24=9;
x8+d25-d26=134;
!fungsi kendala/sasaran;
2375000*x1 + 645500*x2 + 508000*x3 + 3350000*x4+ 2495000*x5 +
1830000*x6 + 2225000*x7 + 1275000*x8 + d31 - d32 = b1;
!keuntungan produksi;
1337500*x1 + 372500*x2 + 279000*x3 + 2025000*x4 + 1247000*x5 +
915000*x6 + 1162500*x7 + 637500*x8 + d41 - d42 = c1;
!pembatas non negatif;
x1>=0;
x2>=0;
x3>=0;
x4>=0;
x5>=0;
x6>=0;
x7>=0;
x8>=0;
d11>=0;
d12>=0;
d13>=0;
d14>=0;
d15>=0;
d16>=0;
d17>=0;
d18>=0;
d19>=0;
d20>=0;
d21>=0;
d22>=0;
d23>=0;
d24>=0;
d25>=0;
d26>=0; end
```

OUTPUT BULAN APRIL 2024

```
  Global optimal solution found.
  Objective value:                              0.000000
  Infeasibilities:                              0.000000
  Total solver iterations:                             0
  Elapsed runtime seconds:                          0.11

  Model Class:                                        LP

  Total variables:                    30
  Nonlinear variables:                 0
  Integer variables:                   0

  Total constraints:                  35
  Nonlinear constraints:               0

  Total nonzeros:                     88
  Nonlinear nonzeros:                  0


                            Variable           Value
Reduced Cost
                                 D11        0.000000
0.5000000
                                 D12        0.000000
0.5000000
                                 D13        0.000000
0.5000000
                                 D14        0.000000
0.5000000
                                 D15        0.000000
0.5000000
                                 D16        0.000000
0.5000000
                                 D17        0.000000
0.5000000
                                 D18        0.000000
0.5000000
                                 D19        0.000000
0.5000000
                                 D20        0.000000
0.5000000
                                 D21        0.000000
0.5000000
                                 D22        0.000000
0.5000000
                                 D23        0.000000
0.5000000
                                 D24        0.000000
0.5000000
                                 D25        0.000000
0.5000000
                                 D26        0.000000
0.5000000
```

	D32 0.000000
0.3000000	
	D42 0.000000
0.2000000	
	X1 230.0000
0.000000	
	X2 3595.000
0.000000	
	X3 5481.000
0.000000	
	X4 184.0000
0.000000	
	X5 47.00000
0.000000	
	X6 24.00000
0.000000	
	X7 9.000000
0.000000	
	X8 134.0000
0.000000	
	D31 0.000000
0.000000	
	B1 0.6619630E+10
0.000000	
	D41 0.000000
0.000000	
	C1 0.3725018E+10
0.000000	

Dual Price	Row	Slack or Surplus
-1.000000	1	0.000000
0.000000	2	0.000000
0.000000	3	0.000000
0.000000	4	0.000000
0.000000	5	0.000000
0.000000	6	0.000000
0.000000	7	0.000000
0.000000	8	0.000000
0.000000	9	0.000000
0.000000	10	0.000000
0.000000	11	0.000000
0.000000	12	230.0000

	13 3595.000
0.000000	
	14 5481.000
0.000000	
	15 184.0000
0.000000	
	16 47.00000
0.000000	
	17 24.00000
0.000000	
	18 9.000000
0.000000	
	19 134.0000
0.000000	
	20 0.000000
0.000000	
	21 0.000000
0.000000	
	22 0.000000
0.000000	
	23 0.000000
0.000000	
	24 0.000000
0.000000	
	25 0.000000
0.000000	
	26 0.000000
0.000000	
	27 0.000000
0.000000	
	28 0.000000
0.000000	
	29 0.000000
0.000000	
	30 0.000000
0.000000	
	31 0.000000
0.000000	
	32 0.000000
0.000000	
	33 0.000000
0.000000	
	34 0.000000
0.000000	
	35 0.000000
0.000000	

INPUT BULAN MEI 2024

```
!fungsi tujuan;
min = 0.5*
(d11+d12+d13+d14+d15+d16+d17+d18+d19+d20+d21+d22+d23+d24+d25+d26)+
0.3*(d32)+0.2*(d42);
!variabel keputusan;
x1+d11-d12=230;
x2+d13-d14=3821;
x3+d15-d16=5703;
x4+d17-d18=183;
x5+d19-d20=54;
x6+d21-d22=21;
x7+d23-d24=11;
x8+d25-d26=134;
!fungsi kendala/sasaran;
2375000*x1 + 645500*x2 + 508000*x3 + 3350000*x4+ 2495000*x5 +
1830000*x6 + 2225000*x7 + 1275000*x8 + d31 - d32 = b1;
!keuntungan produksi;
1337500*x1 + 372500*x2 + 279000*x3 + 2025000*x4 + 1247000*x5 +
915000*x6 + 1162500*x7 + 637500*x8 + d41 - d42 = c1;
!pembatas non negatif;
x1>=0;
x2>=0;
x3>=0;
x4>=0;
x5>=0;
x6>=0;
x7>=0;
x8>=0;
d11>=0;
d12>=0;
d13>=0;
d14>=0;
d15>=0;
d16>=0;
d17>=0;
d18>=0;
d19>=0;
d20>=0;
d21>=0;
d22>=0;
d23>=0;
d24>=0;
d25>=0;
d26>=0; end
```

OUTPUT BULAN MEI 2024

```
  Global optimal solution found.
  Objective value:                              0.000000
  Infeasibilities:                              0.000000
  Total solver iterations:                             0
  Elapsed runtime seconds:                          0.11

  Model Class:                                        LP

  Total variables:                    30
  Nonlinear variables:                 0
  Integer variables:                   0

  Total constraints:                  35
  Nonlinear constraints:               0

  Total nonzeros:                     88
  Nonlinear nonzeros:                  0


                             Variable           Value
Reduced Cost
                                  D11        0.000000
0.5000000
                                  D12        0.000000
0.5000000
                                  D13        0.000000
0.5000000
                                  D14        0.000000
0.5000000
                                  D15        0.000000
0.5000000
                                  D16        0.000000
0.5000000
                                  D17        0.000000
0.5000000
                                  D18        0.000000
0.5000000
                                  D19        0.000000
0.5000000
                                  D20        0.000000
0.5000000
                                  D21        0.000000
0.5000000
                                  D22        0.000000
0.5000000
                                  D23        0.000000
0.5000000
                                  D24        0.000000
0.5000000
                                  D25        0.000000
0.5000000
                                  D26        0.000000
0.5000000
```

D32	0.000000
D42	0.000000
X1	230.0000
X2	3821.000
X3	5703.000
X4	183.0000
X5	54.00000
X6	21.00000
X7	11.00000
X8	134.0000
D31	0.000000
B1	0.6891364E+10
D41	0.000000
C1	0.3877425E+10

Row	Slack or Surplus
1	0.000000
2	0.000000
3	0.000000
4	0.000000
5	0.000000
6	0.000000
7	0.000000
8	0.000000
9	0.000000
10	0.000000
11	0.000000
12	230.0000

Dual Price
0.3000000
0.2000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
-1.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000

	13 3821.000
0.000000	
	14 5703.000
0.000000	
	15 183.0000
0.000000	
	16 54.00000
0.000000	
	17 21.00000
0.000000	
	18 11.00000
0.000000	
	19 134.0000
0.000000	
	20 0.000000
0.000000	
	21 0.000000
0.000000	
	22 0.000000
0.000000	
	23 0.000000
0.000000	
	24 0.000000
0.000000	
	25 0.000000
0.000000	
	26 0.000000
0.000000	
	27 0.000000
0.000000	
	28 0.000000
0.000000	
	29 0.000000
0.000000	
	30 0.000000
0.000000	
	31 0.000000
0.000000	
	32 0.000000
0.000000	
	33 0.000000
0.000000	
	34 0.000000
0.000000	
	35 0.000000
0.000000	

INPUT BULAN JUNI 2024

```
!fungsi tujuan;
min = 0.5*
(d11+d12+d13+d14+d15+d16+d17+d18+d19+d20+d21+d22+d23+d24+d25+d26)+
0.3*(d32)+0.2*(d42);
!variabel keputusan;
x1+d11-d12=229;
x2+d13-d14=3778;
x3+d15-d16=5835;
x4+d17-d18=182;
x5+d19-d20=50;
x6+d21-d22=23;
x7+d23-d24=10;
x8+d25-d26=134;
!fungsi kendala/sasaran;
2375000*x1 + 645500*x2 + 508000*x3 + 3350000*x4+ 2495000*x5 +
1830000*x6 + 2225000*x7 + 1275000*x8 + d31 - d32 = b1;
!keuntungan produksi;
1337500*x1 + 372500*x2 + 279000*x3 + 2025000*x4 + 1247000*x5 +
915000*x6 + 1162500*x7 + 637500*x8 + d41 - d42 = c1;
x1>=0;
x2>=0;
x3>=0;
x4>=0;
x5>=0;
x6>=0;
x7>=0;
x8>=0;
d11>=0;
d12>=0;
d13>=0;
d14>=0;
d15>=0;
d16>=0;
d17>=0;
d18>=0;
d19>=0;
d20>=0;
d21>=0;
d22>=0;
d23>=0;
d24>=0;
d25>=0;
d26>=0; end
```

OUTPUT BULAN JUNI 2024

```
  Global optimal solution found.
  Objective value:                              0.000000
  Infeasibilities:                              0.000000
  Total solver iterations:                             0
  Elapsed runtime seconds:                          0.10

  Model Class:                                        LP

  Total variables:                    30
  Nonlinear variables:                 0
  Integer variables:                   0

  Total constraints:                  35
  Nonlinear constraints:               0

  Total nonzeros:                     88
  Nonlinear nonzeros:                  0


                           Variable           Value
Reduced Cost
                                D11        0.000000
0.5000000
                                D12        0.000000
0.5000000
                                D13        0.000000
0.5000000
                                D14        0.000000
0.5000000
                                D15        0.000000
0.5000000
                                D16        0.000000
0.5000000
                                D17        0.000000
0.5000000
                                D18        0.000000
0.5000000
                                D19        0.000000
0.5000000
                                D20        0.000000
0.5000000
                                D21        0.000000
0.5000000
                                D22        0.000000
0.5000000
                                D23        0.000000
0.5000000
                                D24        0.000000
0.5000000
                                D25        0.000000
0.5000000
                                D26        0.000000
0.5000000
```

	D32 0.000000
0.3000000	
	D42 0.000000
0.2000000	
	X1 229.0000
0.000000	
	X2 3778.000
0.000000	
	X3 5835.000
0.000000	
	X4 182.0000
0.000000	
	X5 50.00000
0.000000	
	X6 23.00000
0.000000	
	X7 10.00000
0.000000	
	X8 134.0000
0.000000	
	D31 0.000000
0.000000	
	B1 0.6916394E+10
0.000000	
	D41 0.000000
0.000000	
	C1 0.3890552E+10
0.000000	

Dual Price	Row	Slack or Surplus
-1.000000	1	0.000000
0.000000	2	0.000000
0.000000	3	0.000000
0.000000	4	0.000000
0.000000	5	0.000000
0.000000	6	0.000000
0.000000	7	0.000000
0.000000	8	0.000000
0.000000	9	0.000000
0.000000	10	0.000000
0.000000	11	0.000000
0.000000	12	229.0000

	13 3778.000
0.000000	
	14 5835.000
0.000000	
	15 182.0000
0.000000	
	16 50.00000
0.000000	
	17 23.00000
0.000000	
	18 10.00000
0.000000	
	19 134.0000
0.000000	
	20 0.000000
0.000000	
	21 0.000000
0.000000	
	22 0.000000
0.000000	
	23 0.000000
0.000000	
	24 0.000000
0.000000	
	25 0.000000
0.000000	
	26 0.000000
0.000000	
	27 0.000000
0.000000	
	28 0.000000
0.000000	
	29 0.000000
0.000000	
	30 0.000000
0.000000	
	31 0.000000
0.000000	
	32 0.000000
0.000000	
	33 0.000000
0.000000	
	34 0.000000
0.000000	
	35 0.000000
0.000000	

INPUT BULAN JULI 2024

```
!fungsi tujuan;
min = 0.5*
(d11+d12+d13+d14+d15+d16+d17+d18+d19+d20+d21+d22+d23+d24+d25+d26)+
0.3*(d32)+0.2*(d42);
!variabel keputusan;
x1+d11-d12=232;
x2+d13-d14=3704;
x3+d15-d16=5631;
x4+d17-d18=185;
x5+d19-d20=49;
x6+d21-d22=20;
x7+d23-d24=10;
x8+d25-d26=133;
!fungsi kendala/sasaran;
2375000*x1 + 645500*x2 + 508000*x3 + 3350000*x4+ 2495000*x5 +
1830000*x6 + 2225000*x7 + 1275000*x8 + d31 - d32 = b1;
!keuntungan produksi;
1337500*x1 + 372500*x2 + 279000*x3 + 2025000*x4 + 1247000*x5 +
915000*x6 + 1162500*x7 + 637500*x8 + d41 - d42 = c1;
x1>=0;
x2>=0;
x3>=0;
x4>=0;
x5>=0;
x6>=0;
x7>=0;
x8>=0;
d11>=0;
d12>=0;
d13>=0;
d14>=0;
d15>=0;
d16>=0;
d17>=0;
d18>=0;
d19>=0;
d20>=0;
d21>=0;
d22>=0;
d23>=0;
d24>=0;
d25>=0;
d26>=0; end
```

OUTPUT BULAN JULI 2024

```
  Global optimal solution found.
  Objective value:                              0.000000
  Infeasibilities:                              0.000000
  Total solver iterations:                             0
  Elapsed runtime seconds:                          0.10

  Model Class:                                        LP

  Total variables:                    30
  Nonlinear variables:                 0
  Integer variables:                   0

  Total constraints:                  35
  Nonlinear constraints:               0

  Total nonzeros:                     88
  Nonlinear nonzeros:                  0


                           Variable           Value
Reduced Cost
                                D11        0.000000
0.5000000
                                D12        0.000000
0.5000000
                                D13        0.000000
0.5000000
                                D14        0.000000
0.5000000
                                D15        0.000000
0.5000000
                                D16        0.000000
0.5000000
                                D17        0.000000
0.5000000
                                D18        0.000000
0.5000000
                                D19        0.000000
0.5000000
                                D20        0.000000
0.5000000
                                D21        0.000000
0.5000000
                                D22        0.000000
0.5000000
                                D23        0.000000
0.5000000
                                D24        0.000000
0.5000000
                                D25        0.000000
0.5000000
                                D26        0.000000
0.5000000
```

	0.3000000
	0.2000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000

Dual Price
-1.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000

D32	0.000000
D42	0.000000
X1	232.0000
X2	3704.000
X3	5631.000
X4	185.0000
X5	49.00000
X6	20.00000
X7	10.00000
X8	133.0000
D31	0.000000
B1	0.6772910E+10
D41	0.000000
C1	0.3811530E+10

Row	Slack or Surplus
1	0.000000
2	0.000000
3	0.000000
4	0.000000
5	0.000000
6	0.000000
7	0.000000
8	0.000000
9	0.000000
10	0.000000
11	0.000000
12	232.0000

	13 3704.000
0.000000	14 5631.000
0.000000	15 185.0000
0.000000	16 49.00000
0.000000	17 20.00000
0.000000	18 10.00000
0.000000	19 133.0000
0.000000	20 0.000000
0.000000	21 0.000000
0.000000	22 0.000000
0.000000	23 0.000000
0.000000	24 0.000000
0.000000	25 0.000000
0.000000	26 0.000000
0.000000	27 0.000000
0.000000	28 0.000000
0.000000	29 0.000000
0.000000	30 0.000000
0.000000	31 0.000000
0.000000	32 0.000000
0.000000	33 0.000000
0.000000	34 0.000000
0.000000	35 0.000000
0.000000	

INPUT BULAN AGUSTUS 2024

```
!fungsi tujuan;
min = 0.5*
(d11+d12+d13+d14+d15+d16+d17+d18+d19+d20+d21+d22+d23+d24+d25+d26)+
0.3*(d32)+0.2*(d42);
!variabel keputusan;
x1+d11-d12=231;
x2+d13-d14=3874;
x3+d15-d16=6140;
x4+d17-d18=185;
x5+d19-d20=47;
x6+d21-d22=18;
x7+d23-d24=11;
x8+d25-d26=133;
!fungsi kendala/sasaran;
2375000*x1 + 645500*x2 + 508000*x3 + 3350000*x4+ 2495000*x5 +
1830000*x6 + 2225000*x7 + 1275000*x8 + d31 - d32 = b1;
!keuntungan produksi;
1337500*x1 + 372500*x2 + 279000*x3 + 2025000*x4 + 1247000*x5 +
915000*x6 + 1162500*x7 + 637500*x8 + d41 - d42 = c1;
!pembatas non negatif;
x1>=0;
x2>=0;
x3>=0;
x4>=0;
x5>=0;
x6>=0;
x7>=0;
x8>=0;
d11>=0;
d12>=0;
d13>=0;
d14>=0;
d15>=0;
d16>=0;
d17>=0;
d18>=0;
d19>=0;
d20>=0;
d21>=0;
d22>=0;
d23>=0;
d24>=0;
d25>=0;
d26>=0; end
```

OUPUT BULAN AGUSTUS 2024

```
  Global optimal solution found.
  Objective value:                              0.000000
  Infeasibilities:                              0.000000
  Total solver iterations:                             0
  Elapsed runtime seconds:                          0.11

  Model Class:                                        LP

  Total variables:                    30
  Nonlinear variables:                 0
  Integer variables:                   0

  Total constraints:                  35
  Nonlinear constraints:               0

  Total nonzeros:                     88
  Nonlinear nonzeros:                  0


                            Variable           Value
Reduced Cost
                                 D11        0.000000
0.5000000
                                 D12        0.000000
0.5000000
                                 D13        0.000000
0.5000000
                                 D14        0.000000
0.5000000
                                 D15        0.000000
0.5000000
                                 D16        0.000000
0.5000000
                                 D17        0.000000
0.5000000
                                 D18        0.000000
0.5000000
                                 D19        0.000000
0.5000000
                                 D20        0.000000
0.5000000
                                 D21        0.000000
0.5000000
                                 D22        0.000000
0.5000000
                                 D23        0.000000
0.5000000
                                 D24        0.000000
0.5000000
                                 D25        0.000000
0.5000000
                                 D26        0.000000
0.5000000
```

D32	0.000000
D42	0.000000
X1	231.0000
X2	3874.000
X3	6140.000
X4	185.0000
X5	47.00000
X6	18.00000
X7	11.00000
X8	133.0000
D31	0.000000
B1	0.7132417E+10
D41	0.000000
C1	0.4012366E+10

Row	Slack or Surplus
1	0.000000
2	0.000000
3	0.000000
4	0.000000
5	0.000000
6	0.000000
7	0.000000
8	0.000000
9	0.000000
10	0.000000
11	0.000000
12	231.0000

0.3000000

0.2000000

0.000000

0.000000

0.000000

0.000000

0.000000

0.000000

0.000000

0.000000

0.000000

0.000000

0.000000

Dual Price

-1.000000

0.000000

0.000000

0.000000

0.000000

0.000000

0.000000

0.000000

0.000000

0.000000

0.000000

0.000000

0.000000

	13 3874.000
0.000000	
	14 6140.000
0.000000	
	15 185.0000
0.000000	
	16 47.00000
0.000000	
	17 18.00000
0.000000	
	18 11.00000
0.000000	
	19 133.0000
0.000000	
	20 0.000000
0.000000	
	21 0.000000
0.000000	
	22 0.000000
0.000000	
	23 0.000000
0.000000	
	24 0.000000
0.000000	
	25 0.000000
0.000000	
	26 0.000000
0.000000	
	27 0.000000
0.000000	
	28 0.000000
0.000000	
	29 0.000000
0.000000	
	30 0.000000
0.000000	
	31 0.000000
0.000000	
	32 0.000000
0.000000	
	33 0.000000
0.000000	
	34 0.000000
0.000000	
	35 0.000000
0.000000	

INPUT BULAN SEPTEMBER 2024

```
!fungsi tujuan;
min = 0.5*
(d11+d12+d13+d14+d15+d16+d17+d18+d19+d20+d21+d22+d23+d24+d25+d26)+
0.3*(d32)+0.2*(d42);
!variabel keputusan;
x1+d11-d12=230;
x2+d13-d14=3502;
x3+d15-d16=6511;
x4+d17-d18=187;
x5+d19-d20=47;
x6+d21-d22=16;
x7+d23-d24=13;
x8+d25-d26=135;
!fungsi kendala/sasaran;
2375000*x1 + 645500*x2 + 508000*x3 + 3350000*x4+ 2495000*x5 +
1830000*x6 + 2225000*x7 + 1275000*x8 + d31 - d32 = b1;
!keuntungan produksi;
1337500*x1 + 372500*x2 + 279000*x3 + 2025000*x4 + 1247000*x5 +
915000*x6 + 1162500*x7 + 637500*x8 + d41 - d42 = c1;
!pembatas non negatif;
x1>=0;
x2>=0;
x3>=0;
x4>=0;
x5>=0;
x6>=0;
x7>=0;
x8>=0;
d11>=0;
d12>=0;
d13>=0;
d14>=0;
d15>=0;
d16>=0;
d17>=0;
d18>=0;
d19>=0;
d20>=0;
d21>=0;
d22>=0;
d23>=0;
d24>=0;
d25>=0;
d26>=0; end
```

OUPUT BULAN SEPTEMBER 2024

```
  Global optimal solution found.
  Objective value:                              0.000000
  Infeasibilities:                              0.000000
  Total solver iterations:                             0
  Elapsed runtime seconds:                          0.11

  Model Class:                                        LP

  Total variables:                    30
  Nonlinear variables:                 0
  Integer variables:                   0

  Total constraints:                  35
  Nonlinear constraints:               0

  Total nonzeros:                     88
  Nonlinear nonzeros:                  0


                            Variable           Value
Reduced Cost
                                 D11        0.000000
0.5000000
                                 D12        0.000000
0.5000000
                                 D13        0.000000
0.5000000
                                 D14        0.000000
0.5000000
                                 D15        0.000000
0.5000000
                                 D16        0.000000
0.5000000
                                 D17        0.000000
0.5000000
                                 D18        0.000000
0.5000000
                                 D19        0.000000
0.5000000
                                 D20        0.000000
0.5000000
                                 D21        0.000000
0.5000000
                                 D22        0.000000
0.5000000
                                 D23        0.000000
0.5000000
                                 D24        0.000000
0.5000000
                                 D25        0.000000
0.5000000
                                 D26        0.000000
0.5000000
```

	D32 0.000000
0.3000000	
	D42 0.000000
0.2000000	
	X1 230.0000
0.000000	
	X2 3502.000
0.000000	
	X3 6511.000
0.000000	
	X4 187.0000
0.000000	
	X5 47.00000
0.000000	
	X6 16.00000
0.000000	
	X7 13.00000
0.000000	
	X8 135.0000
0.000000	
	D31 0.000000
0.000000	
	B1 0.7088424E+10
0.000000	
	D41 0.000000
0.000000	
	C1 0.3981788E+10
0.000000	

Dual Price	Row	Slack or Surplus
-1.000000	1	0.000000
0.000000	2	0.000000
0.000000	3	0.000000
0.000000	4	0.000000
0.000000	5	0.000000
0.000000	6	0.000000
0.000000	7	0.000000
0.000000	8	0.000000
0.000000	9	0.000000
0.000000	10	0.000000
0.000000	11	0.000000
0.000000	12	230.0000

	13 3502.000
0.000000	14 6511.000
0.000000	15 187.0000
0.000000	16 47.00000
0.000000	17 16.00000
0.000000	18 13.00000
0.000000	19 135.0000
0.000000	20 0.000000
0.000000	21 0.000000
0.000000	22 0.000000
0.000000	23 0.000000
0.000000	24 0.000000
0.000000	25 0.000000
0.000000	26 0.000000
0.000000	27 0.000000
0.000000	28 0.000000
0.000000	29 0.000000
0.000000	30 0.000000
0.000000	31 0.000000
0.000000	32 0.000000
0.000000	33 0.000000
0.000000	34 0.000000
0.000000	35 0.000000
0.000000	

INPUT BULAN OKTOBER 2024

```
!fungsi tujuan;
min = 0.5*
(d11+d12+d13+d14+d15+d16+d17+d18+d19+d20+d21+d22+d23+d24+d25+d26)+
0.3*(d32)+0.2*(d42);
!variabel keputusan;
x1+d11-d12=233;
x2+d13-d14=3276;
x3+d15-d16=5039;
x4+d17-d18=188;
x5+d19-d20=46;
x6+d21-d22=18;
x7+d23-d24=11;
x8+d25-d26=138;
!fungsi kendala/sasaran;
2375000*x1 + 645500*x2 + 508000*x3 + 3350000*x4+ 2495000*x5 +
1830000*x6 + 2225000*x7 + 1275000*x8 + d31 - d32 = b1;
!keuntungan produksi;
1337500*x1 + 372500*x2 + 279000*x3 + 2025000*x4 + 1247000*x5 +
915000*x6 + 1162500*x7 + 637500*x8 + d41 - d42 = c1;
!pembatas non negatif;
x1>=0;
x2>=0;
x3>=0;
x4>=0;
x5>=0;
x6>=0;
x7>=0;
x8>=0;
d11>=0;
d12>=0;
d13>=0;
d14>=0;
d15>=0;
d16>=0;
d17>=0;
d18>=0;
d19>=0;
d20>=0;
d21>=0;
d22>=0;
d23>=0;
d24>=0;
d25>=0;
d26>=0; end
```

OUPUT BULAN OKTOBER 2024

```
  Global optimal solution found.
  Objective value:                              0.000000
  Infeasibilities:                              0.000000
  Total solver iterations:                             0
  Elapsed runtime seconds:                          0.11

  Model Class:                                        LP

  Total variables:                    30
  Nonlinear variables:                 0
  Integer variables:                   0

  Total constraints:                  35
  Nonlinear constraints:               0

  Total nonzeros:                     88
  Nonlinear nonzeros:                  0


                            Variable           Value
Reduced Cost
                                 D11        0.000000
0.5000000
                                 D12        0.000000
0.5000000
                                 D13        0.000000
0.5000000
                                 D14        0.000000
0.5000000
                                 D15        0.000000
0.5000000
                                 D16        0.000000
0.5000000
                                 D17        0.000000
0.5000000
                                 D18        0.000000
0.5000000
                                 D19        0.000000
0.5000000
                                 D20        0.000000
0.5000000
                                 D21        0.000000
0.5000000
                                 D22        0.000000
0.5000000
                                 D23        0.000000
0.5000000
                                 D24        0.000000
0.5000000
                                 D25        0.000000
0.5000000
                                 D26        0.000000
0.5000000
```

0.3000000	
0.2000000	
0.000000	
0.000000	
0.000000	
0.000000	
0.000000	
0.000000	
0.000000	
0.000000	
0.000000	
0.000000	
0.000000	

	Dual Price
	-1.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000
	0.000000

D32	0.000000
D42	0.000000
X1	233.0000
X2	3276.000
X3	5039.000
X4	188.0000
X5	46.00000
X6	18.00000
X7	11.00000
X8	138.0000
D31	0.000000
B1	0.6205780E+10
D41	0.000000
C1	0.3493123E+10

Row	Slack or Surplus
1	0.000000
2	0.000000
3	0.000000
4	0.000000
5	0.000000
6	0.000000
7	0.000000
8	0.000000
9	0.000000
10	0.000000
11	0.000000
12	233.0000

	13 3276.000
0.000000	
	14 5039.000
0.000000	
	15 188.0000
0.000000	
	16 46.00000
0.000000	
	17 18.00000
0.000000	
	18 11.00000
0.000000	
	19 138.0000
0.000000	
	20 0.000000
0.000000	
	21 0.000000
0.000000	
	22 0.000000
0.000000	
	23 0.000000
0.000000	
	24 0.000000
0.000000	
	25 0.000000
0.000000	
	26 0.000000
0.000000	
	27 0.000000
0.000000	
	28 0.000000
0.000000	
	29 0.000000
0.000000	
	30 0.000000
0.000000	
	31 0.000000
0.000000	
	32 0.000000
0.000000	
	33 0.000000
0.000000	
	34 0.000000
0.000000	
	35 0.000000
0.000000	

INPUT BULAN NOVEMBER 2024

```
!fungsi tujuan;
min = 0.5*
(d11+d12+d13+d14+d15+d16+d17+d18+d19+d20+d21+d22+d23+d24+d25+d26)+
0.3*(d32)+0.2*(d42);
!variabel keputusan;
x1+d11-d12=232;
x2+d13-d14=3277;
x3+d15-d16=4631;
x4+d17-d18=186;
x5+d19-d20=43;
x6+d21-d22=18;
x7+d23-d24=11;
x8+d25-d26=139;
!fungsi kendala/sasaran;
2375000*x1 + 645500*x2 + 508000*x3 + 3350000*x4+ 2495000*x5 +
1830000*x6 + 2225000*x7 + 1275000*x8 + d31 - d32 = b1;
!keuntungan produksi;
1337500*x1 + 372500*x2 + 279000*x3 + 2025000*x4 + 1247000*x5 +
915000*x6 + 1162500*x7 + 637500*x8 + d41 - d42 = c1;
!pembatas non negatif;
x1>=0;
x2>=0;
x3>=0;
x4>=0;
x5>=0;
x6>=0;
x7>=0;
x8>=0;
d11>=0;
d12>=0;
d13>=0;
d14>=0;
d15>=0;
d16>=0;
d17>=0;
d18>=0;
d19>=0;
d20>=0;
d21>=0;
d22>=0;
d23>=0;
d24>=0;
d25>=0;
d26>=0; end
```

OUPUT BULAN NOVEMBER 2024

```
 Global optimal solution found.
Objective value:                              0.000000
Infeasibilities:                              0.000000
Total solver iterations:                             0
Elapsed runtime seconds:                          0.11

Model Class:                                        LP

Total variables:                    30
Nonlinear variables:                 0
Integer variables:                   0

Total constraints:                  35
Nonlinear constraints:               0

Total nonzeros:                     88
Nonlinear nonzeros:                  0


                         Variable           Value
Reduced Cost
                              D11        0.000000
0.5000000
                              D12        0.000000
0.5000000
                              D13        0.000000
0.5000000
                              D14        0.000000
0.5000000
                              D15        0.000000
0.5000000
                              D16        0.000000
0.5000000
                              D17        0.000000
0.5000000
                              D18        0.000000
0.5000000
                              D19        0.000000
0.5000000
                              D20        0.000000
0.5000000
                              D21        0.000000
0.5000000
                              D22        0.000000
0.5000000
                              D23        0.000000
0.5000000
                              D24        0.000000
0.5000000
                              D25        0.000000
0.5000000
                              D26        0.000000
0.5000000
```

D32	0.000000
D42	0.000000
X1	232.0000
X2	3277.000
X3	4631.000
X4	186.0000
X5	43.00000
X6	18.00000
X7	11.00000
X8	139.0000
D31	0.000000
B1	0.5983876E+10
D41	0.000000
C1	0.3371172E+10

Row	Slack or Surplus
1	0.000000
2	0.000000
3	0.000000
4	0.000000
5	0.000000
6	0.000000
7	0.000000
8	0.000000
9	0.000000
10	0.000000
11	0.000000
12	232.0000

Dual Price
0.3000000
0.2000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000

Dual Price
-1.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000

	13 3277.000
0.000000	14 4631.000
0.000000	15 186.0000
0.000000	16 43.00000
0.000000	17 18.00000
0.000000	18 11.00000
0.000000	19 139.0000
0.000000	20 0.000000
0.000000	21 0.000000
0.000000	22 0.000000
0.000000	23 0.000000
0.000000	24 0.000000
0.000000	25 0.000000
0.000000	26 0.000000
0.000000	27 0.000000
0.000000	28 0.000000
0.000000	29 0.000000
0.000000	30 0.000000
0.000000	31 0.000000
0.000000	32 0.000000
0.000000	33 0.000000
0.000000	34 0.000000
0.000000	35 0.000000
0.000000	

INPUT BULAN DESEMBER 2024

```
!fungsi tujuan;
min = 0.5*
(d11+d12+d13+d14+d15+d16+d17+d18+d19+d20+d21+d22+d23+d24+d25+d26)+
0.3*(d32)+0.2*(d42);
!variabel keputusan;
x1+d11-d12=231;
x2+d13-d14=3219;
x3+d15-d16=4276;
x4+d17-d18=187;
x5+d19-d20=46;
x6+d21-d22=16;
x7+d23-d24=10;
x8+d25-d26=137;
!fungsi kendala/sasaran;
2375000*x1 + 645500*x2 + 508000*x3 + 3350000*x4+ 2495000*x5 +
1830000*x6 + 2225000*x7 + 1275000*x8 + d31 - d32 = b1;
!keuntungan produksi;
1337500*x1 + 372500*x2 + 279000*x3 + 2025000*x4 + 1247000*x5 +
915000*x6 + 1162500*x7 + 637500*x8 + d41 - d42 = c1;
!pembatas non negatif;
x1>=0;
x2>=0;
x3>=0;
x4>=0;
x5>=0;
x6>=0;
x7>=0;
x8>=0;
d11>=0;
d12>=0;
d13>=0;
d14>=0;
d15>=0;
d16>=0;
d17>=0;
d18>=0;
d19>=0;
d20>=0;
d21>=0;
d22>=0;
d23>=0;
d24>=0;
d25>=0;
d26>=0; end
```

OUPUT BULAN DESEMBER 2024

```
  Global optimal solution found.
  Objective value:                              0.000000
  Infeasibilities:                              0.000000
  Total solver iterations:                             0
  Elapsed runtime seconds:                          0.11

  Model Class:                                        LP

  Total variables:                    30
  Nonlinear variables:                 0
  Integer variables:                   0

  Total constraints:                  35
  Nonlinear constraints:               0

  Total nonzeros:                     88
  Nonlinear nonzeros:                  0


                            Variable           Value
Reduced Cost
                                 D11        0.000000
0.5000000
                                 D12        0.000000
0.5000000
                                 D13        0.000000
0.5000000
                                 D14        0.000000
0.5000000
                                 D15        0.000000
0.5000000
                                 D16        0.000000
0.5000000
                                 D17        0.000000
0.5000000
                                 D18        0.000000
0.5000000
                                 D19        0.000000
0.5000000
                                 D20        0.000000
0.5000000
                                 D21        0.000000
0.5000000
                                 D22        0.000000
0.5000000
                                 D23        0.000000
0.5000000
                                 D24        0.000000
0.5000000
                                 D25        0.000000
0.5000000
                                 D26        0.000000
0.5000000
```

D32	0.000000
D42	0.000000
X1	231.0000
X2	3219.000
X3	4276.000
X4	187.0000
X5	46.00000
X6	16.00000
X7	10.00000
X8	137.0000
D31	0.000000
B1	0.5766122E+10
D41	0.000000
C1	0.3250684E+10

Row	Slack or Surplus
1	0.000000
2	0.000000
3	0.000000
4	0.000000
5	0.000000
6	0.000000
7	0.000000
8	0.000000
9	0.000000
10	0.000000
11	0.000000
12	231.0000

Dual Price
0.3000000
0.2000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000

Dual Price
-1.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000
0.000000

	13 3219.000
0.000000	
	14 4276.000
0.000000	
	15 187.0000
0.000000	
	16 46.00000
0.000000	
	17 16.00000
0.000000	
	18 10.00000
0.000000	
	19 137.0000
0.000000	
	20 0.000000
0.000000	
	21 0.000000
0.000000	
	22 0.000000
0.000000	
	23 0.000000
0.000000	
	24 0.000000
0.000000	
	25 0.000000
0.000000	
	26 0.000000
0.000000	
	27 0.000000
0.000000	
	28 0.000000
0.000000	
	29 0.000000
0.000000	
	30 0.000000
0.000000	
	31 0.000000
0.000000	
	32 0.000000
0.000000	
	33 0.000000
0.000000	
	34 0.000000
0.000000	
	35 0.000000
0.000000	