

```

libname pr '.';
/*EJERCICIO 1 TEMA III*/
data pr.pr1;
  input _row_ $13. x1 x2 x3 _type_ $ _rhs_;
  datalines;
Beneficio      35 40 30  MAX      .
Materia_Prima  1  3  4   LE    2000
Mano_de_Obra   5  4  2   LE    1500
Pedido         0  1  0   GE     300
;
run;

proc print data=pr.pr1;
run;

proc lp data=pr.pr1;
run;
1

```

Obs	_row_	x1	x2	x3	_type_	_rhs_
1	Beneficio	35	40	30	MAX	.
2	Materia_Prima	1	3	4	LE	2000
3	Mano_de_Obra	5	4	2	LE	1500
4	Pedido	0	1	0	GE	300

The LP Procedure

Problem Summary

Objective Function	Max Beneficio
Rhs Variable	_rhs_
Type Variable	_type_
Problem Density (%)	55.56

Variables	Number
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Non-negative	3
Slack	2
Surplus	1

Total	6
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Constraints	Number
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LE	2
GE	1
Objective	1

Total	4
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The LP Procedure

Solution Summary

Terminated Successfully

Objective Value	16500
Phase 1 Iterations	1
Phase 2 Iterations	2
Phase 3 Iterations	0
Integer Iterations	0
Integer Solutions	0
Initial Basic Feasible Variables	5
Time Used (seconds)	0
Number of Inversions	3
Epsilon	1E-8
Infinity	1.797693E308
Maximum Phase 1 Iterations	100
Maximum Phase 2 Iterations	100
Maximum Phase 3 Iterations	99999999
Maximum Integer Iterations	100
Time Limit (seconds)	120

Variable Summary

Col	Variable Name	Status	Type	Price	Activity	Reduced Cost
1	x1		NON-NEG	35	0	-40
2	x2	BASIC	NON-NEG	40	300	0
3	X3	BASIC	NON-NEG	30	150	0
4	Materia_Prima	BASIC	SLACK	0	500	0
5	Mano_de_Obra		SLACK	0	0	-15
6	Pedido		SURPLUS	0	0	-20

Constraint Summary

Row	Constraint Name	Type	S/S Col	Rhs	Activity	Dual Activity
1	Beneficio	OBJECTIVE	.	0	16500	.
2	Materia_Prima	LE	4	2000	1500	0
3	Mano_de_Obra	LE	5	1500	1500	15
4	Pedido	GE	6	300	300	-20