EXAMPLE 1  
  
c = [18 70 36 56 87 77]’;  
  
a = [  
54 0 0 64 0 0;  
0 54 0 0 64 0;   
0 0 54 0 0 64;   
1 0 0 0 0 0;   
0 1 0 0 0 0;   
0 0 1 0 0 0;   
1 0 0 0 0 0;   
0 1 0 0 0 0;   
0 0 1 0 0 0];  
  
b = [79 51 7 29 65 16 46 88 37]';  
lb = [0;0;0;0;0;0]; ## Same # of c values  
ub = [];  
ctype = “UUUUUUUUU”; ## Based on b-rows  
vtype = “CCCCCC”; ## Same # of c values  
sense = -1;  
param.msglev = 1;  
param.itlim = 100;  
param.outfrq = 200;  
[xmin, fmin, status, extra]=glpk(c,a,b,lb,ub,ctype,vtype,sense, param)

Output:

xmin =  
  
 0.00000  
 0.00000  
 0.00000  
 1.23438  
 0.79688  
 0.10938  
  
fmin = 146.88

>> time

ans = 1.4614e+009

EXAMPLE 2  
  
c = [86 26 75]';  
  
a = [  
33 0 0;  
0 59 0;   
0 0 37;   
1 0 0;   
0 1 0;   
0 0 1];  
  
b = [79 59 37 42 82 13]';

lb = [0;0;0];  
ub = [];  
ctype = “UUUUUU”;  
vtype = “CCC”;  
sense = -1;  
param.msglev = 1;  
param.itlim = 100;  
param.outfrq = 200;  
[xmin, fmin, status, extra]=glpk(c,a,b,lb,ub,ctype,vtype,sense, param)

Output:

xmin =

2.3939

1.0000

1.0000

fmin = 306.88

>> time

ans = 1.4614e+009

////////////////////////

EXAMPLE 3

c = [98 54 77]';

a = [

58 0 0;

0 58 0;

0 0 58;

1 0 0;

0 1 0;

0 0 1];

b = [3 58 41 17 35 86]';

lb = [0;0;0]; ## Same # of c values  
ub = [];  
ctype = “UUUUUU”; ## Based on b-rows  
vtype = “CCC”; ## Same # of c values  
sense = -1;  
param.msglev = 1;  
param.itlim = 100;  
param.outfrq = 200;  
[xmin, fmin, status, extra]=glpk(c,a,b,lb,ub,ctype,vtype,sense, param)

Output:

xmin =

0.051724

1.000000

0.706897

fmin = 113.50

蝶>> time

ans = 1.4614e+009

//////////

EXAMPLE 4

c=[67 74 17 67 83 47]';

a = [

91 0 0 62 0 0;

0 91 0 0 62 0;

0 0 91 0 0 62;

1 0 0 0 0 0;

0 1 0 0 0 0;

0 0 1 0 0 0;

1 0 0 0 0 0;

0 1 0 0 0 0;

0 0 1 0 0 0];

//

a = [

91 0 0 62 0 0;

0 91 0 0 62 0;

0 0 91 0 0 62;

1 0 0 0 0 0;

0 1 0 0 0 0;

0 0 1 0 0 0;

1 0 0 0 0 0;

0 1 0 0 0 0;

0 0 1 0 0 0];

//

b=[14 3 51 22 85 3 39 50 20]';

lb = [0;0;0;0;0;0]; ## Same # of c values  
ub = [];  
ctype = “UUUUUUUUU”; ## Based on b-Columns  
vtype = “CCCCCC”; ## Same # of c values  
sense = -1;  
param.msglev = 1;  
param.itlim = 100;  
param.outfrq = 200;  
[xmin, fmin, status, extra]=glpk(c,a,b,lb,ub,ctype,vtype,sense, param)

Output: