

```

clc,clear
p=optimproblem('ObjectiveSense','max');
c=[4,3];
a=[2,1;1,1;0,1];
b=[10;8;7];
x=optimvar('x',2,1,'LowerBound',0);%决策变量
p.Objective=c*x;%目标函数
p.Constraints=a*x<=b;%约束条件
[sol,fval,flag,out]=solve(p);

```

Solving problem using linprog.

Optimal solution found.

sol.x

```

ans = 2×1
    2.0000
    6.0000

```

show(p)

OptimizationProblem :

Solve for:

x

maximize :

$4*x(1) + 3*x(2)$

subject to :

$2*x(1) + x(2) \leq 10$

$x(1) + x(2) \leq 8$

$x(2) \leq 7$

variable bounds:

$0 \leq x(1)$

$0 \leq x(2)$