

# Minimization of matrix problems.

quadprog - Quadratic programming.

**Opt2 (m-file):**

```
H=[1 -1;-1 2];  
f=[-2;-6];  
A=[1 1;-1 2;2 1];  
b=[2;2;3];  
lb=zeros(2,1);
```

```
[x,fval,exitflag,output,lambda]=quadprog(H,f,A,b,[],[],lb)
```

**Opt2 (Command Window):**

```
>> 1/2([x1 x2][1 -1;-1 2][x1 x2]T +[-2 -6][x1 x2]T
```

```
X1+x2<=2
```

```
-x1+2x2<=2
```

```
2x1+x2<=3
```

```
X1,x2>=0
```

```
x = [ 0.6667 1.3333 ]
```