```
A1=[1 1 1;4 2 1;1 -1 3]; b1=[4 7 10]';
x = A1\b1

A3=[2 3 0;1 2 -2;2 1 8]; b3=[0 7 -28]'; x=A3\b3
[x1 x2 x3]=solve('2*x1+3*x2=0','x1+2*x2-2*x3=7',...
'2*x1+x2+8*x3=-28')

A=[1 5;2 3];B=[4 1 2;1 0 3]; A*B
B*A
A^2
A.^2

A=[1 -1 1;9 3 1]; b=[0 2]'; a=A\b
A=[-1 1;1 1;2 1]; b=[1 2 3]'; a=A\b

x=1:4; y=[6 6.8 10 10.5]; A=[x' ones(4,1)]; la=A\y'
plot(x,y,'ro','linewidth',3), hold on
x1=0:0.1:5; plot(x1,polyval(la,x1))

la=polyfit(x,y,1)

A=[2 4;4 8.1]; b=[1 1.5]'; x=A\b
A1=[2 4;4 8.01]; x=A1\b
det(A), det(A1)
cond(A), cond(A1)
cond([3 4;4 8.1])
```