

```
commandwindow
```

```
clear
```

```
clc
```

```
%ITER1
```

```
A=[1,1,-2,1,3,-1;2,-1,1,2,1,-3;1,3,-3,-1,2,1;5,2,-1,-1,2,1;-3,-1,2,3,1,3;4,3,1,-6,-3,-2]
```

```
%X=[T1;T2;T3;T4;T5;T6]
```

```
B=[4;20;-15;-3;16;-27]
```

```
%t=inv(A)*B
```

```
F1= A(2,1)/A(1,1)
```

```
F2= A(3,1)/A(1,1)
```

```
F3= A(4,1)/A(1,1)
```

```
F4= A(5,1)/A(1,1)
```

```
F5= A(6,1)/A(1,1)
```

```
A1=[A(1,1) A(1,2) A(1,3) A(1,4) A(1,5) A(1,6);
```

```
    A(2,1)-(F1*A(1,1)) A(2,2)-(F1*A(1,2)) A(2,3)-(F1*A(1,3)) A(2,4)-(F1*A(1,4)) A(2,5)-(F1*A(1,5)) A(2,6)-(F1*A(1,6));
```

```
    A(3,1)-(F2*A(1,1)) A(3,2)-(F2*A(1,2)) A(3,3)-(F2*A(1,3)) A(3,4)-(F2*A(1,4)) A(3,5)-(F2*A(1,5)) A(3,6)-(F2*A(1,6));
```

```
    A(4,1)-(F3*A(1,1)) A(4,2)-(F3*A(1,2)) A(4,3)-(F3*A(1,3)) A(4,4)-(F3*A(1,4)) A(4,5)-(F3*A(1,5)) A(4,6)-(F3*A(1,6));
```

```
    A(5,1)-(F4*A(1,1)) A(5,2)-(F4*A(1,2)) A(5,3)-(F4*A(1,3)) A(5,4)-(F4*A(1,4)) A(5,5)-(F4*A(1,5)) A(5,6)-(F4*A(1,6));
```

```
    A(6,1)-(F5*A(1,1)) A(6,2)-(F5*A(1,2)) A(6,3)-(F5*A(1,3)) A(6,4)-(F5*A(1,4)) A(6,5)-(F5*A(1,5)) A(6,6)-(F5*A(1,6))]
```

```
B1=[B(1,1);
```

```
    B(2,1)-(F1*B(1,1));
```

```
    B(3,1)-(F2*B(1,1));
```

```
    B(4,1)-(F3*B(1,1));
```

```
    B(5,1)-(F4*B(1,1));
```

```
    B(6,1)-(F5*B(1,1))]
```

```
%ITER2
```

```
G1=A1(3,2)/A1(2,2)
```

```
G2= A1(4,2)/A1(2,2)
```

```
G3= A1(5,2)/A1(2,2)
```

```
G4= A1(6,2)/A1(2,2)
```

```
A2=[A1(1,1) A1(1,2) A1(1,3) A1(1,4) A1(1,5) A1(1,6);
```

```
    A1(2,1) A1(2,2) A1(2,3) A1(2,4) A1(2,5) A1(2,6);
```

```
    A1(3,1) A1(3,2)-(G1*A1(2,2)) A1(3,3)-(G1*A1(2,3)) A1(3,4)-(G1*A1(2,4)) A1(3,5)-(G1*A1(2,5)) A1(3,6)-(G1*A1(2,6));
```

```
    A1(4,1) A1(4,2)-(G2*A1(2,2)) A1(4,3)-(G2*A1(2,3)) A1(4,4)-(G2*A1(2,4)) A1(4,5)-(G2*A1(2,5)) A1(4,6)-(G2*A1(2,6));
```

```
    A1(5,1) A1(5,2)-(G3*A1(2,2)) A1(5,3)-(G3*A1(2,3)) A1(5,4)-(G3*A1(2,4)) A1(5,5)-(G3*A1(2,5)) A1(5,6)-(G3*A1(2,6));
```

```
    A1(6,1) A1(6,2)-(G4*A1(2,2)) A1(6,3)-(G4*A1(2,3)) A1(6,4)-(G4*A1(2,4)) A1(6,5)-(G4*A1(2,5)) A1(6,6)-(G4*A1(2,6))]
```

```
B2=[B1(1,1);
```

```
    B1(2,1);
```

```

B1(3,1)-(G1*B1(2,1));
B1(4,1)-(G2*B1(2,1));
B1(5,1)-(G3*B1(2,1));
B1(6,1)-(G4*B1(2,1))]

```

### %ITER3

```

H1=A2(4,3)/A2(3,3)
H2=A2(5,3)/A2(3,3)
H3=A2(6,3)/A2(3,3)

```

```

A3=[A2(1,1) A2(1,2) A2(1,3) A2(1,4) A2(1,5) A2(1,6);
     A2(2,1) A2(2,2) A2(2,3) A2(2,4) A2(2,5) A2(2,6);
     A2(3,1) A2(3,2) A2(3,3) A2(3,4) A2(3,5) A2(3,6);
     A2(4,1) A2(4,2) A2(4,3)-(H1*A2(3,3)) A2(4,4)-(H1*A2(3,4)) A2(4,5)-(H1*A2(3,5)) A2(4,6)-(H1*A2(3,6));
     A2(5,1) A2(5,2) A2(5,3)-(H2*A2(3,3)) A2(5,4)-(H2*A2(3,4)) A2(5,5)-(H2*A2(3,5)) A2(5,6)-(H2*A2(3,6));
     A2(6,1) A2(6,2) A2(6,3)-(H3*A2(3,3)) A2(6,4)-(H3*A2(3,4)) A2(6,5)-(H3*A2(3,5)) A2(6,6)-(H3*A2(3,6)) ]

```

```

B3=[B2(1,1);
     B2(2,1);
     B2(3,1);
     B2(4,1)-(H1*B2(3,1));
     B2(5,1)-(H2*B2(3,1));
     B2(6,1)-(H3*B2(3,1))]

```

### %ITER4

```

I1=A3(5,4)/A3(4,4)
I2=A3(6,4)/A3(4,4)

```

```

A4=[A3(1,1) A3(1,2) A3(1,3) A3(1,4) A3(1,5) A3(1,6);
     A3(2,1) A3(2,2) A3(2,3) A3(2,4) A3(2,5) A3(2,6);
     A3(3,1) A3(3,2) A3(3,3) A3(3,4) A3(3,5) A3(3,6);
     A3(4,1) A3(4,2) A3(4,3) A3(4,4) A3(4,5) A3(4,6);
     A3(5,1) A3(5,2) A3(5,3) A3(5,4)-(I1*A3(4,4)) A3(5,5)-(I1*A3(4,5)) A3(5,6)-(I1*A3(4,6));
     A3(6,1) A3(6,2) A3(6,3) A3(6,4)-(I2*A3(4,4)) A3(6,5)-(I2*A3(4,5)) A3(6,6)-(I2*A3(4,6)) ]

```

```

B4=[B3(1,1);
     B3(2,1);
     B3(3,1);
     B3(4,1);
     B3(5,1)-(I1*B3(4,1));
     B3(6,1)-(I2*B3(4,1))]

```

### %ITER5

```

J1=A4(6,5)/A4(5,5)
A5=[A4(1,1) A4(1,2) A4(1,3) A4(1,4) A4(1,5) A4(1,6);
     A4(2,1) A4(2,2) A4(2,3) A4(2,4) A4(2,5) A4(2,6);

```

```

A4(3,1) A4(3,2) A4(3,3) A4(3,4) A4(3,5) A4(3,6);
A4(4,1) A4(4,2) A4(4,3) A4(4,4) A4(4,5) A4(4,6);
A4(5,1) A4(5,2) A4(5,3) A4(5,4) A4(5,5) A4(5,6);
A4(6,1) A4(6,2) A4(6,3) A4(6,4) A4(6,5) - (J1*A4(5,5)) A4(6,6) - (J1*A4(5,6)) ]
B5=[B4(1,1);
    B4(2,1);
    B4(3,1);
    B4(4,1);
    B4(5,1);
    B4(6,1) - (J1*B4(5,1)) ]

T6=B5(6,1)/A5(6,6)
T5=(B5(5,1) - (A5(5,6)*T6))/A5(5,5)
T4=(B5(4,1) - (A5(4,6)*T6) - (A5(4,5)*T5))/A5(4,4)
T3=(B5(3,1) - (A5(3,6)*T6) - (A5(3,5)*T5) - (A5(3,4)*T4))/A5(3,3)
T2=(B5(2,1) - (A5(2,6)*T6) - (A5(2,5)*T5) - (A5(2,4)*T4) - (A5(2,3)*T3))/A5(2,2)
T1=(B5(1,1) - (A5(1,6)*T6) - (A5(1,5)*T5) - (A5(1,4)*T4) - (A5(1,3)*T3) - (A5(1,2)*T2))/A5(1,1)

%inverse method
t=inv(A)*B

```