

```

A0=A
A0 =
     2     -2      3
     6     -7     14
     4     -8     30
L=eye(3)
L =
     1      0      0
     0      1      0
     0      0      1
A1=A0; A1(2,:)=A0(2,:) - 3*A0(1,:)
A1 =
     2     -2      3
     0     -1      5
     4     -8     30
L(2,1)=3
L =
     1      0      0
     3      1      0
     0      0      1
A2=A1; A2(3,:)=A1(3,)-2*A1(1,:)
A2 =
     2     -2      3
     0     -1      5
     0     -4     24
L(3,1)=2
L =
     1      0      0
     3      1      0
     2      0      1
U=A2; U(3,:)=A2(3,)-4*A2(2,:)
U =
     2     -2      3
     0     -1      5
     0      0      4
L(3,2)=4

```

```

L =
    1    0    0
    3    1    0
    2    4    1

```

```

A
A =
    2   -2    3
    6   -7   14
    4   -8   30

```

```

L*U
ans =
    2   -2    3
    6   -7   14
    4   -8   30

```