```
A = [3 2 -2; -3 -1 3; 1 2 0];

b=[0; 0; 0];
X = eig(A);
[V, D] = eig(A);

A
X
D
V
```

A =

```
     3      2     -2
    -3     -1      3
     1      2      0
```

X =

```
   -1.0000
    1.0000
    2.0000
```

D =

```
   -1.0000         0         0
         0    1.0000         0
         0         0    2.0000
```

V =

```
   -0.5774    0.7071    0.0000
    0.5774   -0.0000    0.7071
   -0.5774    0.7071    0.7071
```

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