

Program 15

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1 PROGRAM 15

Aim : Write a numpy program to eigenvalues and eigenvectors of a given matrix

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```
[12]: import numpy as np
m=np.array([[2,3,1],[1,2,3],[5,1,2]])
w,v=np.linalg.eig(m)
print("Eigen values :",w)
print("Eigen vectors :",v)
```

```
Eigen values : [ 6.58592356+0.j          -0.29296178+2.18472451j
-0.29296178-2.18472451j]
Eigen vectors : [[-0.50370946+0.j          -0.24529405+0.3904931j
-0.24529405-0.3904931j ]
 [-0.54715667+0.j          -0.32199392-0.47709522j -0.32199392+0.47709522j]
 [-0.66850307+0.j          0.67531181+0.j          0.67531181-0.j          ]]
```

```
[ ]:
```