EIGENVALUES-AND-EIGENVECTORS

Aim:

To write a python program to find the Eigenvalues and Eigen Vectors

Equipment's required:

- 1. Hardware PCs
- 2. Anaconda Python 3.7 Installation / Moodle-Code Runner

Algorithm:

Step1:

Import numpy as np

Step 2:

Get array input from user

Step 3:

Using the np.linalg.eig(), we get two results (first is eigenvalue and second is eigenvector) of the given matrix.

Step 4:

Print the program

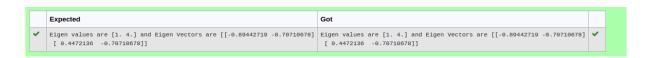
Program: #Program to find the eigen values and eigen vectors.

```
#Developed by: Thirukaalathessvarar S
#RegisterNumber: 22004529

import numpy as np
a=np.array([[2,2],[1,3]])
value,vector=np.linalg.eig(a)
print("Eigen values are {} and Eigen Vectors are
```

```
{}".format(value, vector))
```

Output:



Result:

Thus the Eigenvalue and Eigenvector is successfully solved using python program