EXPERIMENT NO:4(a)
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Aim:To compute Eigen values of a matrix.

Software Required: Google colab.

Description:The main built in function to compute eigen vector problem foe a square array is the eig function in numpy.linalog.create a sample numpy array representing a set of dummy independent variables scale the features.one can use np… calculate the eigen values and eigen vectors using numpy linalog.eig method.

Program&Output:

```
#eigen values of a matrix
import numpy as np
a=np.array([[1,2],[3,4]])
eigvalues,eigvectors=np.linalg.eig(a)
print("eigen value:",eigvalues,"eigen vector:",eigvectors)
```

```
eigen value: [-0.37228132  5.37228132] eigen vector: [[-0.82456484 -0.41597356]
 [ 0.56576746 -0.90937671]]
```

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Result: Eigen values of matrix is computed by python programming.