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Github link: https://github.com/vardhan141/ml\_assignment3

Recorded video link: https://drive.google.com/file/d/16ZggFTQgHF2KNN4p9PLzlv7CwdAQm2y-/view?usp=sharing

1. Using NumPy create random vector of size 15 having only Integers in the range 1-20.

1. Reshape the array to 3 by 5

2. Print array shape.

3. Replace the max in each row by 0

Graphical user interface, text, application, email

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Here we first imported numpy

And we used randint to create vector of size 15 in range of 1-20

And used reshape to reshape into shape (3,5)

We used amax to get the max value in each row and replaced the max with 0 using where function

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We used np.int 32 to create the 4 byte integer elements and used respective methods to get outputs

Text

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We used linalg.eig method to get eigen values and vectors.

Text

Description automatically generated with medium confidence

We used trace method to get the sum over diagonal.

Text

Description automatically generated

We used reshape method to reshape without modifying the data

Graphical user interface, text, application

Description automatically generated

Using mat plot to draw pie chart for popularity of programming languages.

Here we used explode to explode the first slice

And autopct to print percentage.

Chart, pie chart

Description automatically generated