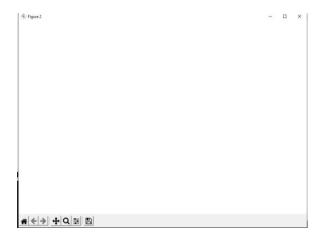
## WCC Python Data Visualization Lab (chapters 15 - 17)

**1)** Write a short program which confirms that your computer has the following 4 python packages installed: matplotlib, pandas, plotly & requests.

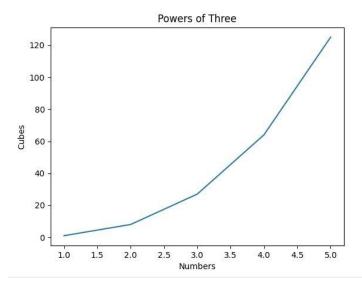
## **Output Example**

The packages are installed

2) Create and show an empty figure 9" by 6"



**3)** Create a chart with a title and axis labels which shows the cube values of the integers 1 through 5 (ref: example 4\_matplotlib\_data)



4) An article is being published about the popularity of the musical group, the Beatles.

The following data has been collected using phone surveys:

People were asked to name their favorite Beatle. The results were:

John 28%

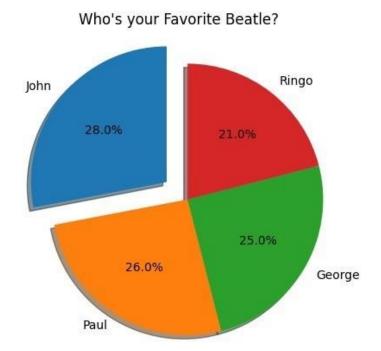
**Paul 26%** 

George 25%

Ringo 21%

You are asked to produce a pie chart to present that data. Give your chart a title and visually highlight the winner of the contest.

(Reference: Plotly or Matplotlib Piechart examples)



**5)** Using matplotlib, create a horizontal bar chart of the even numbers 2 through 10 and their squares. Label as shown (Reference matplotlib examples 6 & 5. Modify for a single axes display.)

## **Output Example**

