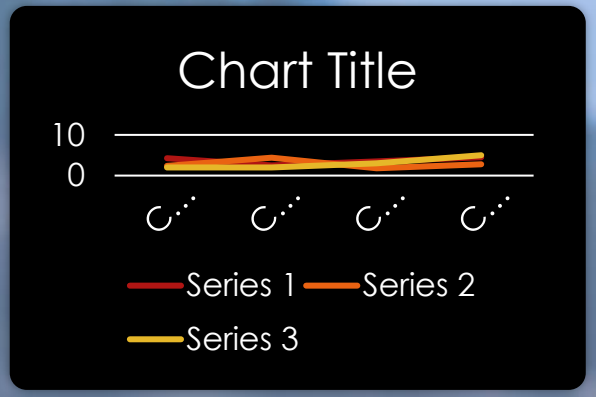
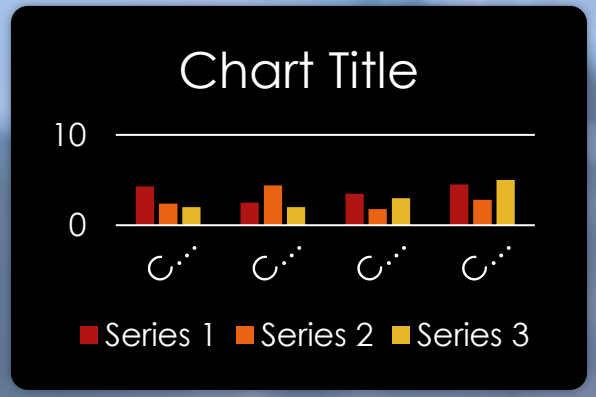
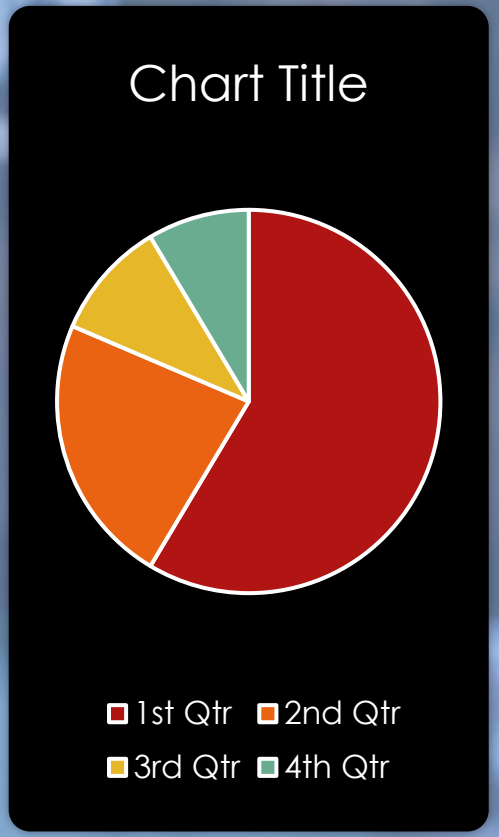
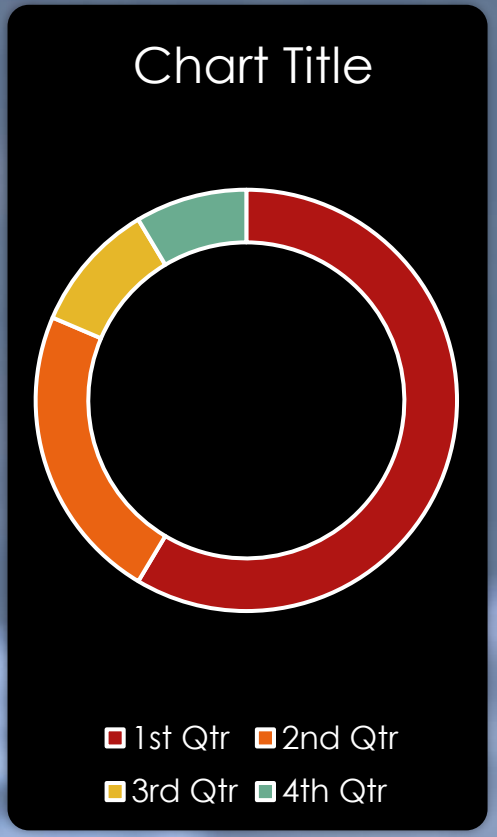
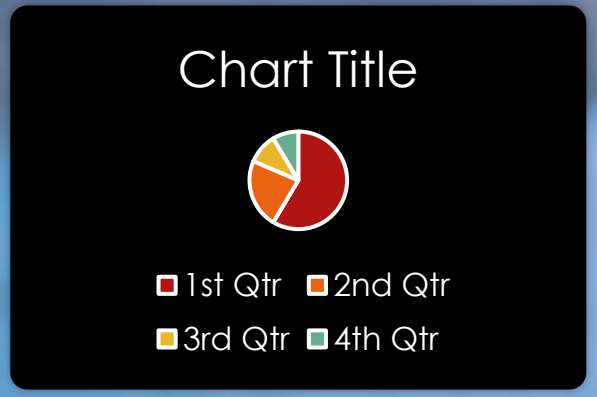
MATPLOTLIB AND NUMPY

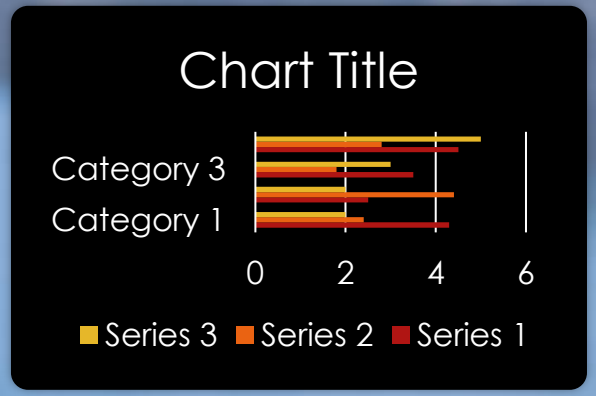












INTRODUCTION:

Matplotlib is a widely-used Python library used for creating static, animated and interactive data visualizations. It is built on the top of **NumPy** and it can easily handles large datasets for creating various types of plots such as line charts, bar charts, scatter plots, etc.

CHARTS AND EXPLAINATION

Line chart

*A **line graph or line chart** is a graphical representation of the data that displays the relationship between two or more variables concerning time. It is made by connecting data points with straight-line segments.*

BAR CHART:

A Bar graph is a type of data-handling method that is popularly used in statistics. A **bar graph** or **bar chart** is a visual presentation of a group of data that is made up of vertical or horizontal rectangular bars with lengths that are equal to the measure of the data.

PIE CHART :

Pie chart is a popular and visually intuitive tool used in data representation, making complex information easier to understand at a glance.

This circular graph divides data into slices, each representing a proportion of the whole, allowing for a clear comparison of different categories making it easier to digest complex information through a straightforward, intuitive format.

SCATTER CHART:

Scatter plot is a mathematical technique that is used to represent data. Scatter plot also called a Scatter Graph, or Scatter Chart uses dots to describe two different numeric variables. The position of each dot on the horizontal and vertical axis indicates values for an individual data point.