

ProjectCastor

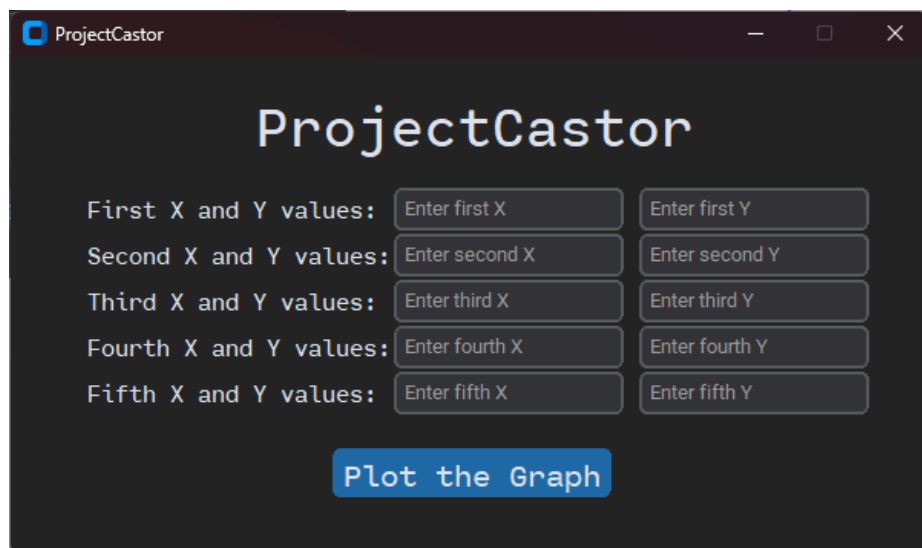
ProjectCastor is a group of young enthusiastic 8th graders each chosen for possessing a talent valuable to the group's goal.

This time, ProjectCastor has come up with an app which allows the plotting of line graphs in a very simple manner.

Note: The following demonstration is run on a Windows 11 machine in dark mode. Results may vary on different machines.

App Guide

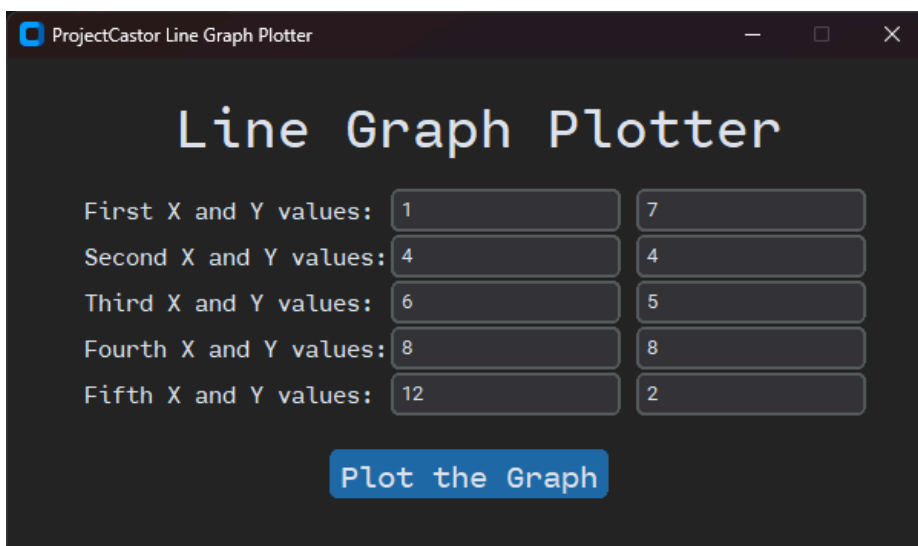
On startup, the app contains the input boxes for 5 pairs of X and Y coordinates. On this screen, we can enter any value for any of the X and Y coordinates we wish to appear on a line graph.

The screenshot shows the ProjectCastor app window. It has a dark theme. At the top, the title bar says "ProjectCastor". The main title "ProjectCastor" is centered. Below it, there are five rows of input fields. Each row is labeled "First X and Y values:", "Second X and Y values:", "Third X and Y values:", "Fourth X and Y values:", and "Fifth X and Y values:". Each label is followed by two input boxes: "Enter first X", "Enter first Y", "Enter second X", "Enter second Y", "Enter third X", "Enter third Y", "Enter fourth X", "Enter fourth Y", "Enter fifth X", and "Enter fifth Y". At the bottom, there is a blue button labeled "Plot the Graph".

First X and Y values:	Enter first X	Enter first Y
Second X and Y values:	Enter second X	Enter second Y
Third X and Y values:	Enter third X	Enter third Y
Fourth X and Y values:	Enter fourth X	Enter fourth Y
Fifth X and Y values:	Enter fifth X	Enter fifth Y

Plot the Graph

In this example, we have taken the following numbers:

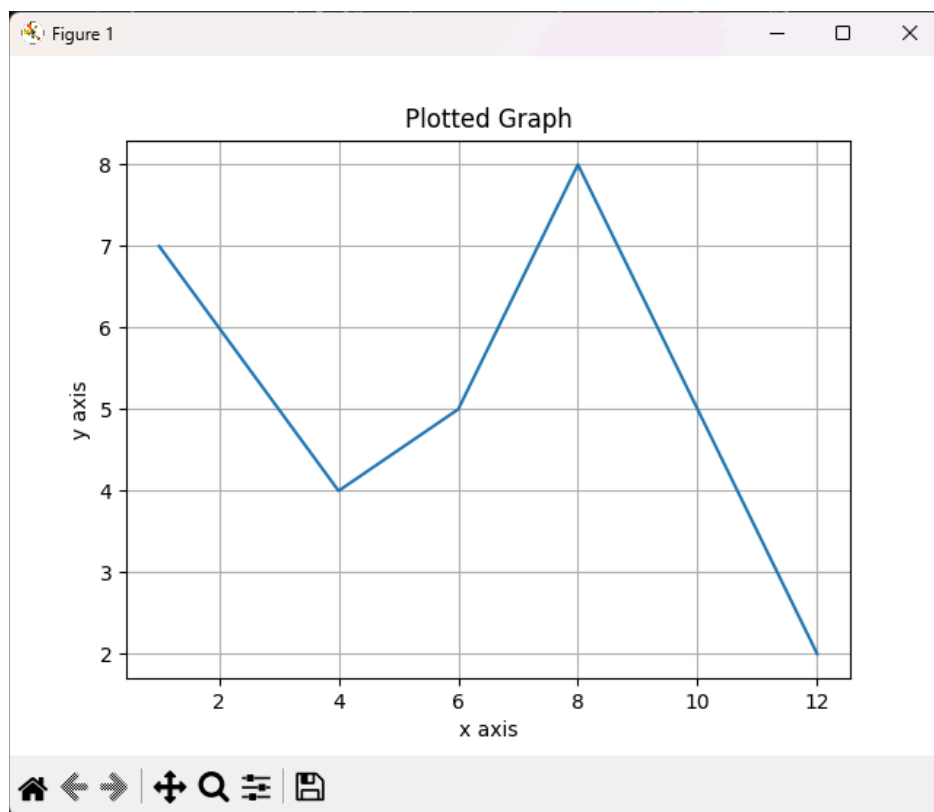
The screenshot shows the ProjectCastor Line Graph Plotter app window. It has a dark theme. The title bar says "ProjectCastor Line Graph Plotter". The main title "Line Graph Plotter" is centered. Below it, there are five rows of input fields. Each row is labeled "First X and Y values:", "Second X and Y values:", "Third X and Y values:", "Fourth X and Y values:", and "Fifth X and Y values:". Each label is followed by two input boxes. The values entered in the boxes are: 1, 7, 4, 4, 6, 5, 8, 8, 12, 2. At the bottom, there is a blue button labeled "Plot the Graph".

First X and Y values:	1	7
Second X and Y values:	4	4
Third X and Y values:	6	5
Fourth X and Y values:	8	8
Fifth X and Y values:	12	2

Plot the Graph

X	Y
1	7
4	4
6	5
8	8
12	2

After we click “Plot the Graph”, the requested line graph appears



Any set of values could work.

Features of ProjectCastor Line Graph Plotter:

- Very easy and straightforward to use.
- Runs on any Windows 10 & Windows 11 system.

matplotlib features:

- Scale is automatically set to the optimal scale for the given values.
- Zoom.
- Size of graph can be adjusted.
- Graph can be saved as an image.

Code explanation will be given during project showcase.