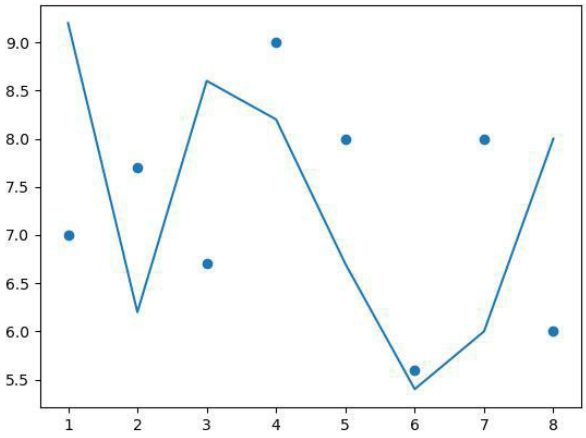
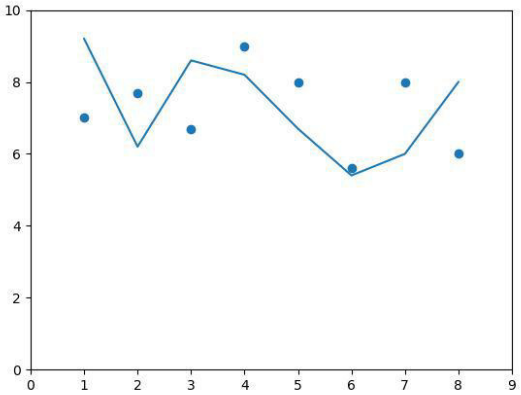
Lab Exercise: Matplotlib

1. Install matplotlib
   pip install matplotlib
2. Import following packages
   import matplotlib.pyplot as plt
3. Use following lists to plot plots given in
   cgpa1=[9.2,6.2,8.6,8.2,6.7,5.4,6,8], cgpa2=[7,7.7,6.7,9,8,5.6,8,6]
   cgpa3=[7.2,6.7,7.7,7,6,6.6,7,5.4], cgpa4=[7.6,8.8,8.7,9,8,7.6,9,9.4]
   sem=[1,2,3,4,5,6,7,8]

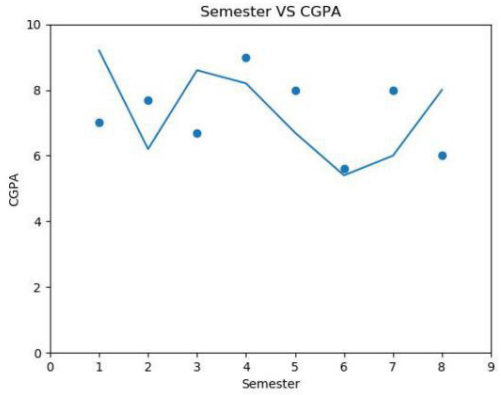
4. Plot following graph using data given in 3



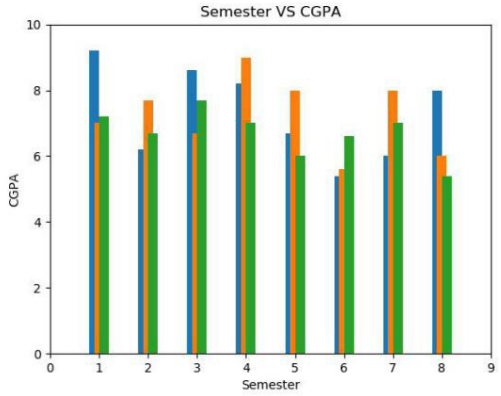
5. Plot following graph using data given in 3 (observe yscale)



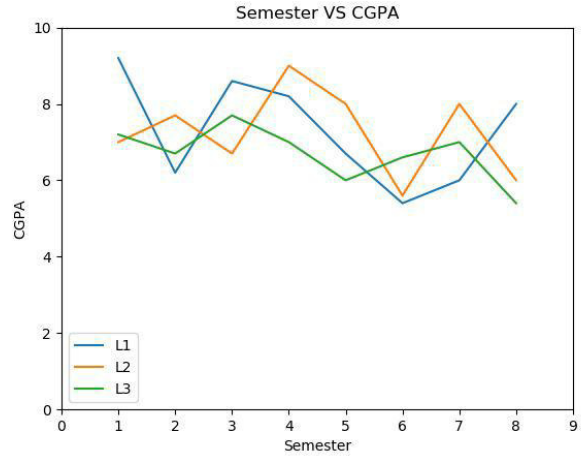
6. Plot following graph using data given in 3 (observe labels)



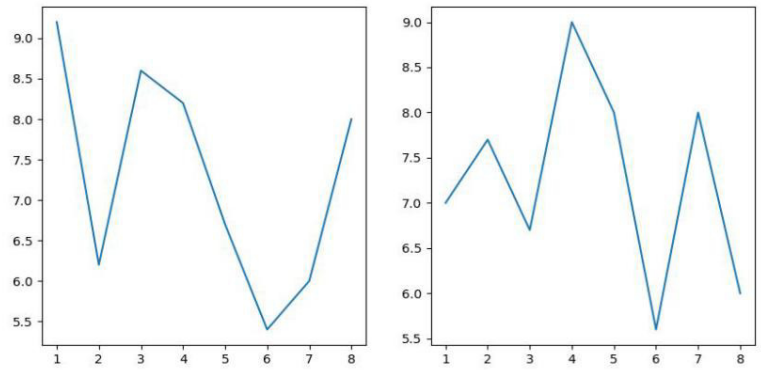
7. Plot following graph using data given in 3 (no 100% overlapping)



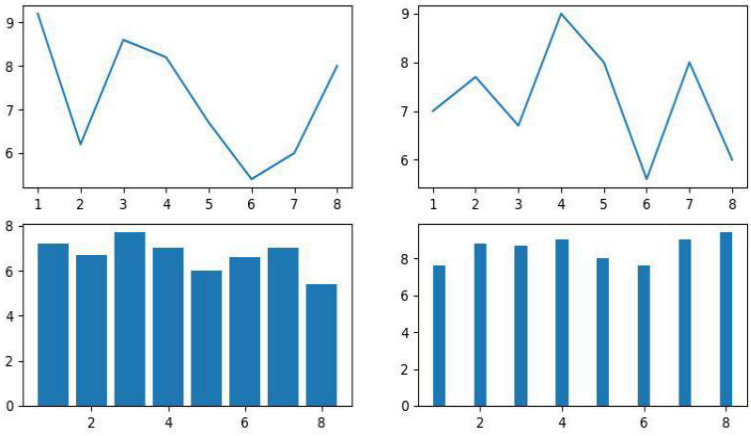
8. Plot following graph using data given in 3 (observe legends)



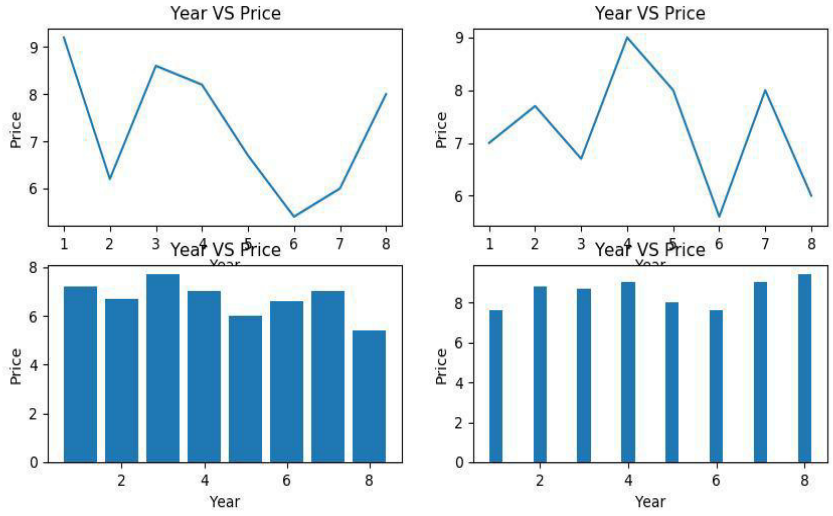
9. Plot following graph using data given in 3 (observe subplots)



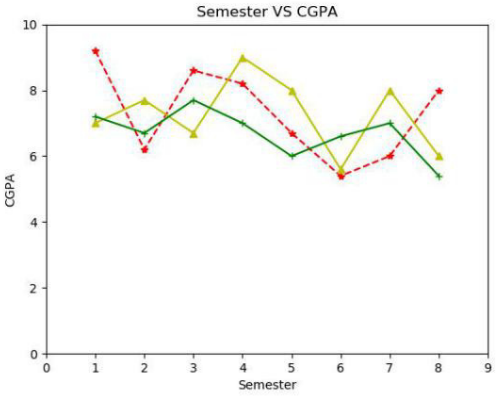
10. Plot following graph using data given in 3 (observe 2x2 subplots without labels)



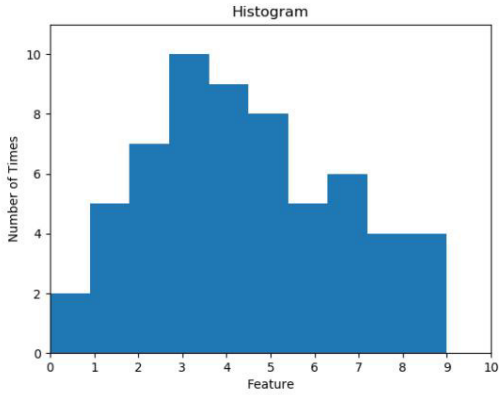
11. Plot following graph using data given in 3 (observe 2x2 subplots with labels)



12. Plot following graph using data given in 3



Plot following graph using data given in 3 Use following data to plot histogram;
x=[1,2,3,2,3,4,5,3,4,5,7,0,3,0,6,8,9,1,2,3,4,5,3,2,1,5,6
,7,8,4,5,3,1,3,6,7,8,9,4,5,6,7,4,2,4,1,5,7,9,4,3,2,3,4,5 ,6,2,7,8,9]



14. Plotting image from a dataset:

```
from sklearn.datasets import
load_digits digits = load_digits()
import matplotlib.pyplot as plt
plt.gray()
plt.matshow(digits.images[0])
print(digits.target[0])
plt.show()
```