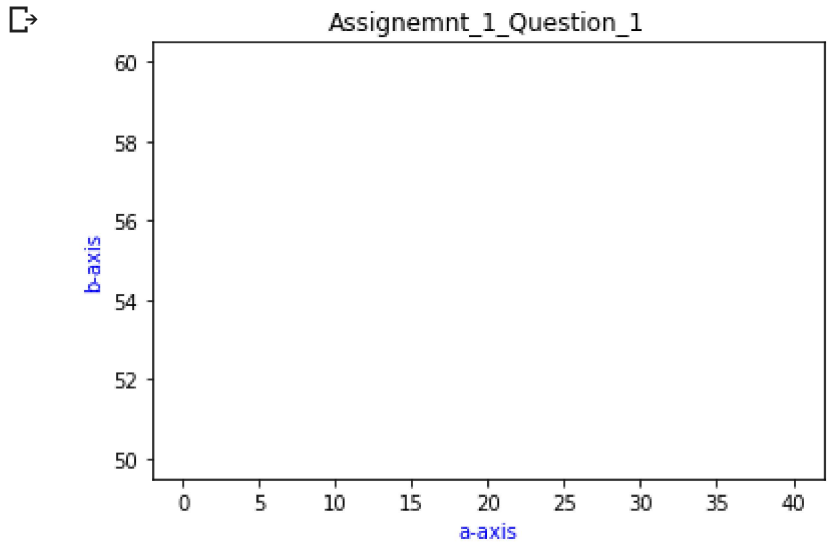
```
import numpy as np
import matplotlib.pyplot as plt
```

Question 1 plot a line plot between a and b a=np.arrange(40,50) b=np.arrange(50,60)

```
#a = np.arrange(40,50)
#b = np.arrange(50,60)


#plt.plot(a, b, "go-")
#plt.plot(a,b, "ro",linestyle="dashed", linewidth=4, markersize=8)
plt.title("Assignemnt_1_Question_1")
plt.xlabel("a-axis", color="blue")
plt.ylabel("b-axis", color="blue")
plt.plot(40, 50, 60)
#plt.plot(a,b)
plt.show()
```

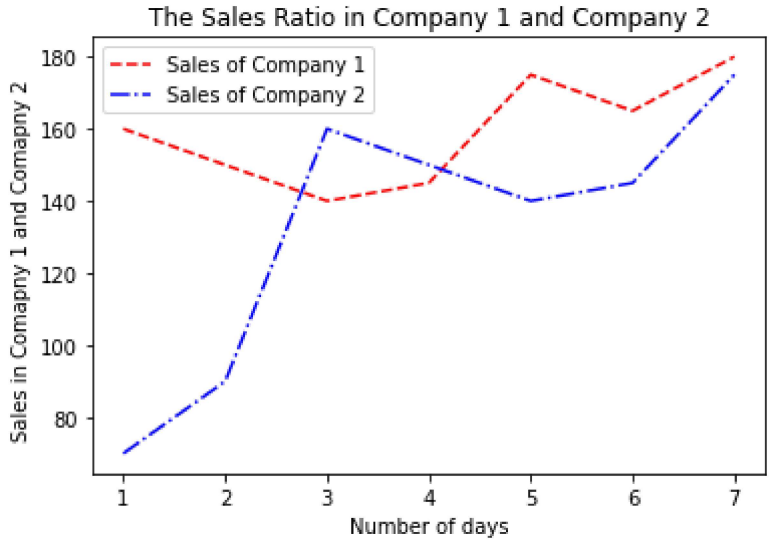


Question 2 plot a line plot showing the sales trend in company 1 and 2 days=[1,2,3,4,5,6,7]#days of d week sales_1=[160,150,140,145,175,165,180]#sales of comapny 1 sales_2= [70,90,160,150,140,145,175]#sales of comapny 2

```
days = [1,2,3,4,5,6,7] #days of d week
sales_1 = [160,150,140,145,175,165,180] #sales of company1
sales_2 = [70,90,160,150,140,145,175] #sales of comapny2


plt.plot(days, sales_1, "r--",label="Sales of Company 1")
plt.plot(days, sales_2, "b-.",label="Sales of Company 2")
plt.title("The Sales Ratio in Company 1 and Company 2")
plt.xlabel("Number of days")
```

```
plt.ylabel( Sales in Comapny 1 and Comapny 2  )
plt.legend()
plt.show()
```



Question 3 Create 3 by 3 subplots multiple plots x=[1,2,3,4] y1=[4,3,2,1] y2=[10,20,30,40] y3=[40,30,20,10] y4=[1,2,1,2] y5=[40,70,90,70]

```
x = [1,2,3,4]
y1 = [4,3,2,1]
y2 = [10,20,30,40]
y3 = [40,30,20,10]
y4 = [1,2,1,2]
y5 = [40,70,90,70]


plt.figure(figsize = (12, 12))

plt.subplot(3, 3, 1)
plt.plot(x, y1, "ro")
plt.xlabel("x")
plt.ylabel("y1")
plt.title("(x and y1)")

plt.subplot(3, 3, 2)
plt.plot(x, y2, "g-")
plt.xlabel("x")
plt.ylabel("y2")
plt.title("(x and y2)")

plt.subplot(3, 3, 3)
plt.plot(x, y3, "b--")
plt.xlabel("x")
plt.ylabel("y3")
plt.title("(x and y3)")
```

```
plt.subplot(3, 3, 4)
plt.plot(x, y4, "c-.")
plt.xlabel("x")
plt.ylabel("y4")
plt.title("(x and y4)")

plt.subplot(3, 3, 5)
plt.plot(x, y5, "k:")
plt.xlabel("x")
plt.ylabel("y5")
plt.title("(x and y5)")

plt.show()
```