Lab 12

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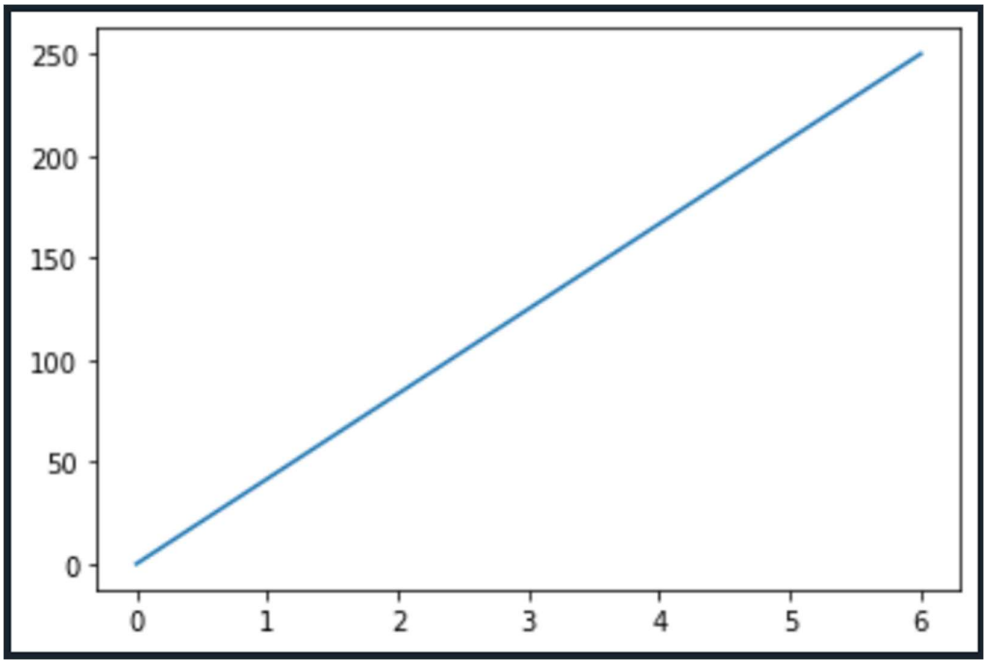
```
class Phone:
    def setcolo(self,color):
        self.color = color
    def setcost(self,cost):
        self.cost = cost
    def showcolour(self):
        return self.color
    def showcost(self):
        return self.cost
    def makecall(self):
        print("Make Call")
    def playgame(self):
        print("Play game")
p1= Phone()

p1.setcolo("RED")
p1.setcost(3000)
print(p1.showcolour())
print(p1.showcost())
p1.makecall()
p1.playgame()
```

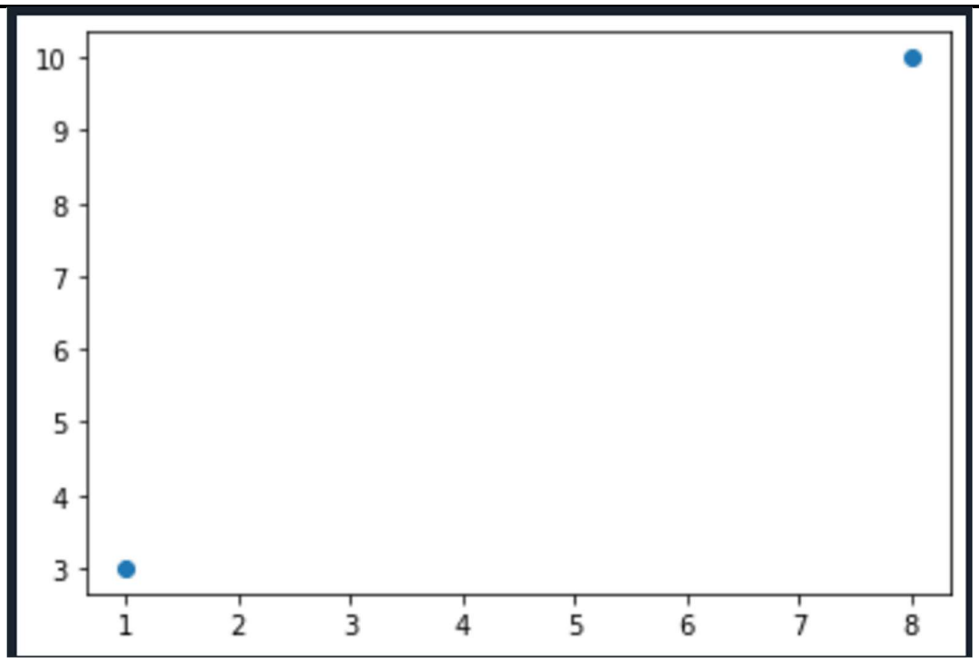
```
RED
3000
Make Call
Play game
```

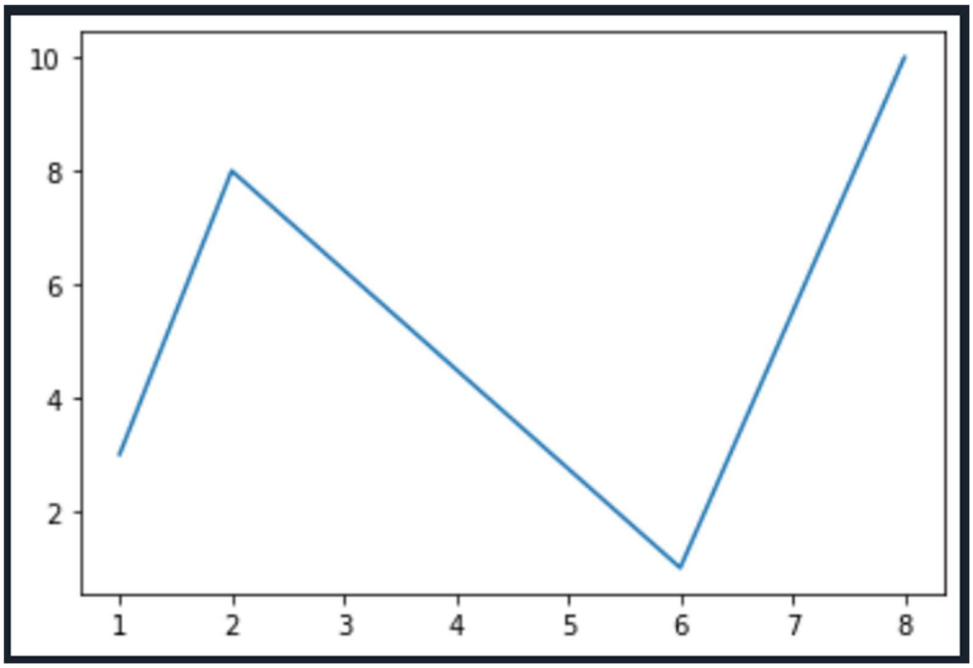
```
class Emploi:
    def init(self,name,age,salary,gender):
        self.name = name
        self.age= age
        self.salary = salary
        self.gender = gender
    def show_detail(self):
        print("Name of employe is ",self.name)
        print("age of employe is ",self.age)
        print("salary of employe is ",self.salary)
        print("gender of employe is ",self.gender)

e1 = Emploi('ccc',102,20,'not decided')
e1.show_detail()



class Vehicle:
    def __init__(self, milage, cost):
        self.milage = milage
        self.cost = cost
    def show_details(self):
        print("Vehicle")
        print("Milage of VEhicle is ", self.milage)
        print("Cost of Vehicle is ", self.cost)

# Insttializing the object for base class
v1 = Vehicle(50, 50000)
```

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

x = np.array([0,6])
y = np.array([0, 250])
plt.plot(x,y)
plt.show()

a = np.array([1,8])
b = np.array([3,10])
plt.plot(a,b,'o')
plt.show()

c = np.array([1, 2, 6, 8])
d = np.array([3, 8, 1, 10])
plt.plot(c, d)
plt.show()

# Plot sine wave

j = np.arrange(0, 3*np.pi, 0.1)
k = np.sin(j)
plt.xlabel("X - Axis")
plt.ylabel("Y - Axis")
plt.title("Sine wave form")

plt.plot(j,k)
plt.show()


# Plot cos wave

j = np.arange(1, 3*np.pi, 0.1)
k = np.sin(j)
plt.xlabel("X - Axis")
plt.ylabel("Y - Axis")
```

```
plt.title("Cos wave form")

plt.plot(j,k)
plt.show()


f = [5,2,9,4,7]
g = [10,5,8,4,2]
plt.plot(f,g)
plt.show()
```




10
9
8
7
6
5
4
3
1
2
3
4
5
6
7
8


10
8
6
4
2
1
2
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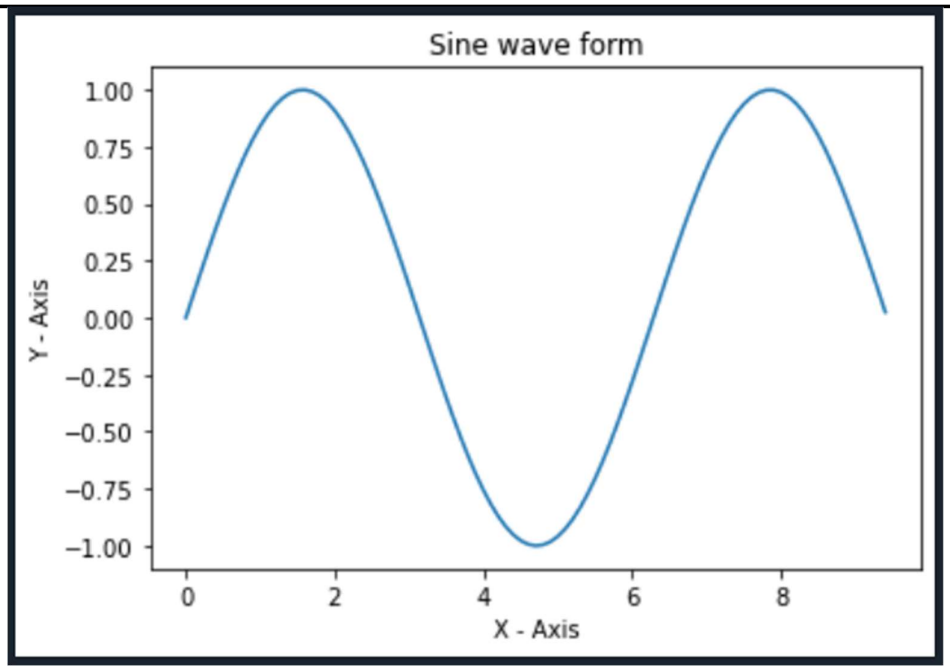
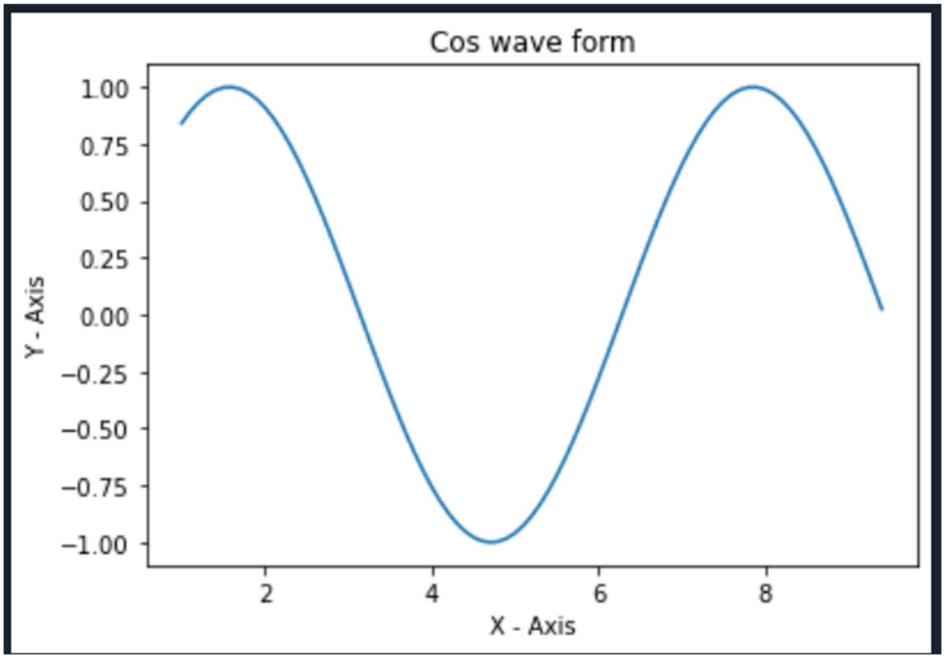
5
6
7
8


Sine wave form
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
Y - Axis
0
2
4
6
8
X - Axis


Cos wave form
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
Y - Axis
2
4
6
8
X - Axis