

In [ ]:

```
#quest1
class point3D:

    def __init__(self,x,y,z):
        self.x=x
        self.y=y
        self.z=z

    def represents(self) :
        return(self.x,self.y,self.z)

my_point=point3D(1,2,3)
print(my_point.represents())
```

In [ ]:

```
#ques2
class Rectangle:
    def __init__(self, length,w):
        self.length=length
        self.w=w

    def area(self) :
        return(self.length*self.w)

    def perimeter(self):
        return(2*(self.w+self.length))

my_rectangle= Rectangle(4,3)
print("the area is",my_rectangle.area(),"the perimeter is",my_rectangle.perimeter() )
```

In [ ]:

```
#quest3
import math
class Circle:
    def __init__(self, center,radius):
        self.radius=radius
        self.center=center

    def area(self) :
        return(2*self.radius*math.pi)

    def perimeter(self):
        return((self.radius*self.radius)*math.pi)

    def isInside(self,x,y):
        self.x=x
        self.y=y

        if (self.x== self.center) and ((x**2+y**2)**(1/2))== self.radius:
            print(" the dot belongs to the circle")
        else :
            print("the dot doesn't belong to the circle")

my_circle= Circle(4,3)
my_circle.isInside(5,4)
print("the area is",my_circle.area(),"the perimeter is",my_circle.perimeter() )
```

In [ ]:

```
#quest4
class Bank_Account:
    def __init__(self):
        self.balance=0
        print(" Welcome to the Deposit & Withdrawal Machine")

    def deposit(self):
        amount=float(input("Enter amount to be Deposited: "))
        self.balance += amount
        print("\n Amount Deposited:",amount)

    def withdraw(self):
        amount = float(input("Enter amount to be Withdrawn: "))
        if self.balance>=amount:
            self.balance-=amount
            print("\n You Withdrew:", amount)
        else:
            print("\n Insufficient balance  ")

    def display(self):
        print("\n Net Available Balance=",self.balance)

s = Bank_Account()
s.deposit()
s.withdraw()
s.display()
```