```
In [12]: #Q1
         lst=[]
         def fib(n):
             a=0
             b=1
             lst.append(a)
             lst.append(b)
             for i in range(2,n):
                 c=a+b
                 a=b
                 b=c
                 lst.append(c)
             return lst
         m=int(input("Enter the value that the dictionary would extend upto: "))
         fib(m)
         nl=[]
         for i in lst:
             if i<=m:
                 nl.append(i)
             else:
                 break
         #print(nl)
         ddd={}
         k=1
         for i in nl:
             ddd[k]=i
             k+=1
         print(ddd)
         n1=int(input("Enter first number: "))
         n2=int(input("Enter second number: "))
         n3=int(input("Enter third number: "))
         kl=[]
         | ]=Jv
         for k,v in ddd.items():
             kl.append(k)
```

```
vl.append(v)
        #print(kl)
        #print(vl)
        if n1 in kl:
            print(vl[n1-1])
        else:
            print('No fibo')
        if n2 in kl:
            print(vl[n2-1])
        else:
            print('No fibo')
        if n3 in kl:
            print(vl[n3-1])
        else:
            print('No fibo')
        Enter dict: 20
        \{1: 0, 2: 1, 3: 1, 4: 2, 5: 3, 6: 5, 7: 8, 8: 13\}
        Enter first number: 3
        Enter second number: 5
        Enter third number: 11
        1
        3
        No fibo
In [7]: #02
        class Avengers:
            count=0
            def init (self, main, part):
                self.main=main
                self.part=part
            def super powers(self,p1,p2):
                self.p1=p1
                self.p2=p2
            def printAvengersDetail(self):
                Avengers.count+=1
                print("Name: ",self.main)
                print("Partner: ",self.part)
                print("Super Powers: ",self.p1,',',self.p2)
```

```
print('Total Avengers:', Avengers.count)
       a1 = Avengers('Captain America', 'Bucky Barnes')
       al.super powers('Stamina', 'Slowed ageing')
       a2 = Avengers('Doctor Strange', 'Ancient One')
       a2.super powers('Mastery of magic', 'Gifted surgeon')
       a3 = Avengers('Iron Man', 'War Machine')
       a3.super powers('Genius level intellect', 'Scientist')
       print("======="")
       al.printAvengersDetail()
       print("======"")
       a2.printAvengersDetail()
       print("======"")
       a3.printAvengersDetail()
       print("======="")
       print('Total Avengers:', Avengers.count)
       Total Avengers: 0
       Name: Captain America
       Partner: Bucky Barnes
       Super Powers: Stamina , Slowed ageing
       Name: Doctor Strange
       Partner: Ancient One
       Super Powers: Mastery of magic , Gifted surgeon
       _____
       Name: Iron Man
       Partner: War Machine
       Super Powers: Genius level intellect , Scientist
       _____
       Total Avengers: 3
In [8]: #Q3
       class Laptop:
```

```
def __init__(self, name):
              self.name = name
           def check(self):
                print('The Laptop is working properly')
       class Asus(Laptop):
           def __init__(self,name):
              super().__init__(name)
           def check(self):
              print("This is Asus", self.name)
              super().check()
       class Dell(Laptop):
           def init (self,name):
              super(). init (name)
           def check(self):
              print("This is Dell", self.name)
              super().check()
       a = Asus("Zenbook 14")
       d = Dell("Inspiron")
       a.check()
       print("======"")
       d.check()
       print("======"")
       This is Asus Zenbook 14
       The Laptop is working properly
       This is Dell Inspiron
       The Laptop is working properly
       _____
In [ ]:
```