Q1

```
class CovidError(Exception):
    def __init__(self,x,y):
        self.o=x
        self.sc=y

    def __str__(self):
        return "\n----\nPatient is Positive!\nOxygen
level:"+str(self.o)+"\nHRCT Score:"+str(self.sc)

class patient:
    def __init__(self):
        self.name=input('Enter name: ')
        self.age=int(input("Enter age: "))
        self.oxy=float(input("Enter oxygen level: "))
        self.score=int(input("Enter HRCT score: "))
        try:
            if(self.oxy < 95.0 or self.score<8):
                raise CovidError(self.oxy,self.score)
            else:
                self.display()
        except CovidError as ce:
            print(ce)




    def display(self):
        print("Name: ",self.name)
        print("Age: ",self.age)
        print("Oxygen level: ",self.oxy)
        print("HRCT score: ",self.score)
        print("Patient is Negative!")


obj=patient()
```

Output:

Enter name: hrishikesh

Enter age: 21

Enter oxygen level: 98

Enter HRCT score: 17

Name: hrishikesh

Age: 21

Oxygen level: 98.0

HRCT score: 17

Patient is Negative!

E:\TYBCS\Python\College\Practice assignment 9>python 1.py

Enter name: kalidas

Enter age: 51

Enter oxygen level: 91

Enter HRCT score: 8

Patient is Positive!

Oxygen level:91.0

HRCT Score:8

Q2

```
class UsernameError(Exception):
    def __init__(self,x):
        self.u=x
    def __str__(self):
        return self.u+"is an invalid username!"

class PasswordError(Exception):
    def __init__(self,x):
        self.p=x
    def __str__(self):
        return self.p+"is an invalid password!"

class user:

    def __init__(self):

        self.uname=input("Enter username: ")
```

```
        try:
            if len(self.uname)<=3:
                raise UsernameError(self.uname)
        except UsernameError as ue:
                print(ue)
                self.uname='user1' #default username
        self.pwd=input("Enter password:")
        try:
            if(len(self.pwd)<8 or self.pwd.isalnum()==False):
                raise PasswordError(self.pwd)
        except PasswordError as pe:
                print(pe)
                self.pwd="occeanic12" #default password

        self.display()




    def display(self):
        print("Username : ",self.uname,"\nPassword : ",self.pwd)


ob=user()
```

Output:

Enter username: kman6969

Enter password:KaliCharan12109630

Username : kman6969

Password : KaliCharan12109630

Enter username: lnz

lnzis an invalid username!

Enter password:(*#(*&#@$(&

(*#(*&#@$(&is an invalid password!

Username : user1

Password : occeanic12

Q3

```
import math

try:
    x = float(input("Enter a number: "))
    ans=math.sqrt(x)
    print("square root : ",ans)
except ValueError as ve:
    print(ve)
```

Output:

Enter a number: 8

square root : 2.8284271247461903
