Qu Exception demo program -1

```
import java.io.*;
import java.util.*;
class edemo
{
	public static void main(String args[])
	{
		Scanner sc =new Scanner(System.in);
		System.out.println("Enter the two numbers");
		int x= sc.nextInt();
		int y= sc.nextInt();
		try
		{
			System.out.println("Devision is::" +(x/y));
		}
		catch(Exception e)
		{
		   System.out.println("Exception caugth" +e);
		}
		System.out.println("My first exception program");
	}
}
```

Qu Exception demo program-2

```
import java.io.*;
import java.util.*;
class edemo1
{
	public static void main(String args[])
	{

		int a[] = {1,2,3};
		try
		{
			System.out.println(a[3]);
```

```
            }
            catch(Exception e)
            {
               System.out.println("Exception caugth" +e);
            }
            System.out.println("my execption program");
        }
}
```

Qu 1 Number is zero Exception otherwise prime or not.

```
import java.util.*;
import java.io.*;

class zero extends Exception
{

}

class prime
{
        static int flag = 0;
        public static void main(String args[])
        {
                Scanner sc = new Scanner(System.in);
                int n,i;
                try
                {
                        System.out.println("Enter the number");
                        n = sc.nextInt();
                        if(n == 0)
                                throw new zero();
                        for(i=2;i<=n/2;i++)
                        {
                                if(n % i == 0)
```

```
                {
                        flag = 1;
                        break;
                }
            }
            if(flag == 0)
                System.out.println("Number is prime");
            else
                System.out.println("Number is not prime");
        }
        catch (zero z)
        {
            System.out.print("Number is zero");
        }
    }
}
```

Qu 2 : Invalid date Exception

```
import java.util.*;
import java.io.*;

class  InvalidDateException extends Exception
{

}

class mydate
{
    int dd,mm,yy;

    public void accept()
    {
        Scanner sc = new Scanner(System.in);
        try
        {
```

```
                    System.out.println("Enter the date");
                    dd = sc.nextInt();
                    System.out.println("Enter the month");
                   mm = sc.nextInt();
                    System.out.println("Enter the year");
                   yy = sc.nextInt();

                    if(dd < 1 || dd > 31 || mm < 1 ||  mm > 12 || yy <  1000
|| yy > 10000)
                            throw new InvalidDateException();
                    else
                            display();
            }

            catch (InvalidDateException d)
            {
                    System.out.println("Invalid date exception caught");
            }

    }
    public void display()
    {
            System.out.println("Enterd Date is Valid dd/mm/yyyy ::
"+dd+"/" + mm+"/" + yy);
    }

    public static void main(String args[])
    {
            mydate m=new mydate();
            m.accept();
    }
}
```

Qu 3: User define Exception [Covid example]

```
import java.io.*;
```

```
import java.util.*;

class CovidException extends Exception
{
	CovidException()
	{
		System.out.print("Patient is Covid Positive, need to be
hospitalized::");
	}
}

class patient
{
	String pname;
	int age,olevel,hrct;
	patient(String pname,int age,int olevel,int hrct)
	{
		this.pname=pname;
		this.age=age;
		this.olevel=olevel;
		this.hrct=hrct;
	}

	public static void main(String args[])
	{
		String pname;
		int age,olevel,hrct;
		Scanner sc = new Scanner(System.in);

		try
		{
			System.out.println("Enter Patient name");
			pname = sc.next();
			System.out.println("Enter Patient age");
		age = sc.nextInt();
			System.out.println("Enter Patient Oxygen level");
		olevel = sc.nextInt();
```

```
                    System.out.println("Enter Patient HRCT scan report");
                  hrct = sc.nextInt();
                    patient p =new patient(pname,age,olevel,hrct);

                    if(olevel < 95 && hrct > 10)
                          throw new CovidException();
                    else
                          System.out.println("Patient name
is::"+pname+"\n Patient age is::"+age+"\n Patient olevel is::"+
olevel+"\n Patient HRCT is::"+ hrct);
              }

              catch(CovidException e)
              {
                    System.out.println(e);
              }
              }
}
```

Qu 4: username and password invalid Exception

```
import java.io.*;
import java.util.*;

class InvalidUsernameException extends Exception
{
      InvalidUsernameException(String u)
      {
            System.out.print("\n Invalid Username Exception caught::"
+u);
      }
}

class InvalidPasswordException extends Exception
{
     InvalidPasswordException(String p)
```

```
        {
                System.out.print("\n Invalid Password Exception caught::"
+p);
        }
}

class logindemo
{

        String username,password;

        logindemo()
        {
                username="Computer";
                password="123";
        }

        logindemo(String u, String p)
        {
              this.username=u;
              this.password=p;
        }

        public static void main(String args[])
        {
                logindemo d= new logindemo();
                String u,p;
                try
                {
                u = args[0];
                p = args[1];
                logindemo d1= new logindemo(u,p);

                if(d.username.equals(d1.username))
                        System.out.println("Username is Valid");
                else
                        throw new InvalidUsernameException(u);
```

```
            if(d.password.equals(d1.password))
                System.out.println("Password is Valid");
            else
                throw new InvalidPasswordException(p);
            }

            catch(InvalidUsernameException uu)
            {
                System.out.print("\t" + uu);
            }

            catch(InvalidPasswordException pp)
            {
                System.out.print("\t" +pp);

            }
        }
}
```