Generic Program:

```java
import java.io.*;

import java.lang.*;

import java.util.*;


class gen<T>
{
        T ob;
        gen(T o)
        {
                ob=o;
        }
        T getob()
        {
                return ob;
        }
        void showtype()
        {
                System.out.println("Type of T is " + ob.getClass().getName());
        }
}

class generic
{
        public static void main(String[] args)
        {
                String n;
                Scanner sc=new Scanner(System.in);
```

```java
            System.out.println("Enter the Integer Number to Be Displayed Using the generic
style");

            n=sc.next();

            gen<Integer> ob1=new gen<Integer>(Integer.parseInt(n));

            ob1.showtype();

            int val=ob1.getob();

            System.out.println("Value is: " + val);


            System.out.println();


            System.out.println("Enter the String to Be Displayed Using the generic style");

            n=sc.next();

            gen<String> ob2=new gen<String>(n);

            ob2.showtype();

            String x=ob2.getob();

            System.out.println("Value : " + x);


            System.out.println();



            System.out.println("Enter the Double Number to Be Displayed Using the generic
style");

            n=sc.next();

            gen<Double> ob3=new gen<Double>(Double.parseDouble(n));

            ob3.showtype();

            double ans=ob3.getob();

            System.out.println("Value : " + ans);


        }
}
```

OUTPUT:

```
C:\Users\Shreehari Kulkarni\OneDrive\Desktop\LAB SUBJECT\JAVALAB>javac generic.java

C:\Users\Shreehari Kulkarni\OneDrive\Desktop\LAB SUBJECT\JAVALAB>java generic
Enter the Integer Number to Be Displayed Using the generic style
25
Type of T is java.lang.Integer
Value is: 25

Enter the String to Be Displayed Using the generic style
Hari
Type of T is java.lang.String
Value : Hari

Enter the Double Number to Be Displayed Using the generic style
550.55
Type of T is java.lang.Double
Value : 550.55

C:\Users\Shreehari Kulkarni\OneDrive\Desktop\LAB SUBJECT\JAVALAB>
```

EXCEPTION PROGRAM:

import java.util.*;

import java.io.*;

import java.lang.*;

class Wrongage extends Exception

{

        public int a;

        Wrongage(int x)

        {

                a=x;

        }

        public String toString()

        {

```java
                return "Wrongage[" + a + "]";
        }
}
class father
{
        public int age;
        father(int a)
        {
                age=a;
        }
        public void check() throws Wrongage
        {
                System.out.println("Checking the age of the father ");
                System.out.println();
                if(age<0)
                        throw new Wrongage(age);
                System.out.println("Correct Age");
        }
}

class son extends father
{
        public int son_age;
        son(int fa_age,int i)
        {
                super(fa_age);
                son_age=i;
        }
        public void check() throws Wrongage
        {
                super.check();
```

```java
                System.out.println();

                System.out.println("Checking the age of the Son ");

                System.out.println();

                if(son_age<0||son_age>age)

                        throw new Wrongage(son_age);

                System.out.println("Correct Age");

        }

}

public class errortest

{

        public static void main(String[] args)

        {

                int so_age,father_age;

                Scanner sc=new Scanner(System.in);

                System.out.println("Enter the Age Of The Father ");

                father_age=sc.nextInt();

                System.out.println("Enter the age of the son ");

                so_age=sc.nextInt();

                son s=new son(father_age,so_age);

                try

                {

                        s.check();

                }catch(Wrongage w)

                {

                        System.out.println("Exception: " + w);

                }


        }


}
```

OUTPUT:

```
Command Prompt
C:\Users\Shreehari Kulkarni\OneDrive\Desktop\LAB SUBJECT\JAVALAB>javac errortest.java

C:\Users\Shreehari Kulkarni\OneDrive\Desktop\LAB SUBJECT\JAVALAB>java errortest
Enter the Age Of The Father
22
Enter the age of the son
80
Checking the age of the father

Correct Age
Checking the age of the Son

Exception: Wrongage[80]

C:\Users\Shreehari Kulkarni\OneDrive\Desktop\LAB SUBJECT\JAVALAB>_
```