8. Write a program that demonstrates handling of exceptions in inheritance tree. Create a base class called “Father” and derived class called “Son” which extends the base class. In Father class, implement a constructor which takes the age and throws the exception Wrong Age( ) when the input age=father’s age.

CODE:

```
import java.util.*;
import java.lang.String;
import java.awt.*;
import java.awt.event.*;
class WrongAge extends Exception{
   int age;
   WrongAge(int x)
   {
      age=x;
   }
  public String toString()
   {
      return "AGE OF SON="+age+" IS ENTERED INCORRECTLY";
   }
}
class father
```

```
{
 int a;
 father(int x)
 {
a=x;
 }
}
class son extends father{
   int age;
   son(int fage,int sage){
      super(fage);
      age=sage;
   }

   void compute() throws WrongAge{
      if(age>=a)
      {
         throw new WrongAge(age);
      }
      else{
         System.out.println("THE AGES ARE ENTERED
CORECTLY");
```

```
            System.out.println("FATHER'S AGE="+a+"\t"+"SON'S
AGE="+age);
        }
    }


}


class expmain
{
    public static void main(String args[])
    {
        Scanner s=new Scanner(System.in);
        System.out.println("ENTER FATHER'S AGE");
        int f=s.nextInt();
        System.out.println("ENTER SON'S AGE");
        int so=s.nextInt();
        son ss=new son(f,so);
        try{
            ss.compute();
        }catch(WrongAge e)
        {
            System.out.println(e);
```

```
        }
    }
}
```

OUTPUT:


ENTER FATHER'S AGE
55
ENTER SON'S AGE
18
THE AGES ARE ENTERED CORECTLY
FATHER'S AGE=55 SON'S AGE=18