Date __/__/____

Lab Program 8

Q) Write a program that demonstrates handling of exceptions in inheritance tree. Create a base class called "Father" and derived class "Son" which extends the base class. In father class, implement a constructor which takes the age and throws the exception WrongAge() when the input age > father's age. In Son class, implement a constructor that cases both father and son's age and throws an exception if son's age is >= father's age.

```
import java.util.*;
class WrongAge extends Exception
{
  public String toString()
  {
    return ("Wrong Age Exception");
  }
}
class Father
{
  int fage;
  Father(int f) throws WrongAge
  {
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter Father's age:");
    fage = sc.nextInt();
    if (fage <= f || fage<0 || f<0)
```

```
    {
        throw new WrongAge();
    }
}
}

class Son extends Father
{
    int sage;
    Son(int s) throws WrongAge
    {
    super(s);
    sage = s;
    }
}

class AgeMain
{
  public static void main (String args[])
  {
    Scanner sc = new Scanner (System.in);
    System.out.println("Enter Son's age:");
    try
    {
     int i = sc.nextInt();
     Son age = new Son(i);
    }
    catch (WrongAge e)
    {
      System.out.println(e);
    }
  }
}
```