## Program 7

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 WrongAge() when the input age=father's age.

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	Son son = new son (40,20);	
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class WrongAge extends Exception {
  public WrongAge(String message) {
    super(message);
  }
}
class Father {
  int age;
  public Father(int age) throws WrongAge {
    if (age < 0) {
       throw new WrongAge("Age cannot be negative for Father.");
     }
    this.age = age;
    System.out.println("Father's age is " + this.age);
  }
}
class Son extends Father {
  int sonAge;
  public Son(int fatherAge, int sonAge) throws WrongAge {
    super(fatherAge);
```

```
if (sonAge >= fatherAge) {
       throw new WrongAge("Son's age cannot be greater than or equal to Father's age.");
     }
    this.sonAge = sonAge;
     System.out.println("Son's age is " + this.sonAge);
  }
}
public class Age {
  public static void main(String[] args) {
    try {
       Father father1 = new Father(-5);
     } catch (WrongAge e) {
       System.out.println("Error: " + e.getMessage());
     }
    try {
       Son son1 = new Son(40, 45);
     } catch (WrongAge e) {
       System.out.println("Error: " + e.getMessage());
     }
    try {
       Son son 2 = new Son(40, 30);
     } catch (WrongAge e) {
       System.out.println("Error: " + e.getMessage());
     }
  }
```

}

## D:\24BMSCE>javac Age.java

D:\24BMSCE>java Age

Error: Age cannot be negative for Father.

Father's age is 40

Error: Son's age cannot be greater than or equal to Father's age.

Father's age is 40

Son's age is 30