3

30/04/24

```
import java.util.Scanner;
class WrongAge extends Exception
{
  public WrongAge(String e)
  {
    super(e);
  }
}
class Father {
private int age;
public Father(int age) throws WrongAge {
 if (age<0){
  throw new WrongAge("Age cannot be negative");
}
this.age=age;
}
public int getAge()
{
  return age;
}
}
class Son extends Father {
  private 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 father's age");
    else if (sonAge<0)
      throw new WrongAge("Age cannot be negative
      this.sonAge=sonAge;
  }
```

```
public int getSonAge()
{
    return sonAge;
}
}
public class ExceptionDemo {
public static void main(String args[])
{
    Scanner s = new Scanner(System.in);
    try{
    System.out.println("enter father's age");
    int fatherAge = s.nextInt();
    System.out.println("enter son age");
    int sonAge = s.nextInt();
    Son son = new Son(fatherAge, sonAge);
    System.out.println("Father's age: "+ son.getFa
    System.out.println("Son's age: "+ son.getSon
    }
    catch(WrongAge e){
    System.out.println("error: "+e.getMessage())
    }
}
}
```

Output

enter father age

-12

enter son age

10

error: Age cannot be negative

enter father age

20

enter son age

30

error: Son's age cannot be greater than father's