

→ Write a program that demonstrates handling of exceptions in inheritance tree.

```
import java.util.*;
```

```
class WrongAge extends Exception {
    public WrongAge(String message) {
        super(message);
    }
}
```

```
class InputScanner {
    Scanner sc;
    public InputScanner() {
        sc = new Scanner(System.in);
    }
}
```

```
class Father extends InputScanner {
    int fatherAge;
    public Father() throws WrongAge,
        InputScanner {
        System.out.println("Enter the father's age:");
        fatherAge = sc.nextInt();
        if (fatherAge < 0) {
            Throw new WrongAge("Age cannot be negative");
        }
    }
    void fdisplay() {
        System.out.println("Father age is: " + fatherAge);
    }
}
```

class Son extends Fatherd

int sonAge;

public Son() throws WrongAge {

System.out.println("Enter Son's age:");

sonAge = sc.nextInt();

if (sonAge > fatherAge)

{

throw new WrongAge("Son's age cannot be greater");

}

else if (sonAge < 0)

{

throw new WrongAge("Age cannot be negative");

}

}

void sdisplay() {

System.out.println("Son's age is: " + sonAge);

}

}

public class ExceptionHandling {

public static void main(String args[]) {

Son p;

try

{

p = new Son();

p.fdisplay();

p.sdisplay();

}

catch (Exception e)

{

System.out.println(e);

}

}

}

Output:

Enter the father's age:

34

Enter the Son's age:

54

WrongAge: Son's age cannot be greater than father's age.

Enter the father's age:

34

Enter the son's age:

-24

WrongAge: Age cannot be negative.

Enter the father's age:

34

Enter the son's age:

34

WrongAge: Age cannot be equal.

✓
WV
501-24