

Lab 7 program:-

```
import java.util.Scanner;
```

```
class WrongAge extends RuntimeException {
```

```
    public WrongAge() {
```

```
        super("Age cannot be negative");
```

```
}
```

```
public WrongAge (String message) {
```

```
    super(message);
```

```
}
```

```
}
```

```
protected Scanner scanner;
```

```
public InputScanner () {
```

```
    protected scanner = new Scanner (System.in);
```

```
}
```

```
public int nextInt () {
```

```
    return scanner.nextInt();
```

```
.
```

```
}
```

```
protected int fatherAge;
```

```
public Father () {
```

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

```
    fatherAge = super.nextInt();
```

```
if (fatherAge < 0) {
```

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

```
}
```

```
public void display() {
    System.out.println("Father's Age : " + fatherAge);
}
```

class Son extends Father {
 private int sonAge;

```
public Son() {
    super();
    System.out.println("Enter Son's age:");
    sonAge = super.nextInt();
```

```
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");
```

```
public void display() {
    super.display();
    System.out.println("Son's age : " + sonAge);
```

public class InheritanceException {
 public static void main (String args[]) {
 try {

Son son = new Son();

son.display();

catch (Wrong Age e) {

System.out.println ("Exception : " + e.getMessage());

}

}

INPUT:-

Enter father's age: 20

Enter son's age: 40

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

Enter father's age: -10

Age cannot be negative

Enter father's age: 45

Enter son's age: 20

Father's age: 45

Son's age: 20

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