

WEEK-7:

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

```
class WrongAge extends Exception
```

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

```
{  
        super(message);
```

```
    }  
}
```

```
class InputScanner
```

```
{  
    protected Scanner s;
```

```
    public InputScanner()
```

```
{
```

```
        s = new Scanner(System.in);
```

```
    }  
}
```

```
class Father extends InputScanner
```

```
{  
    protected int fatherAge;
```

```
    public Father() throws WrongAge
```

```
{
```

```
        System.out.println("Enter Father's Age:");
```

```
        fatherAge = s.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() throws WrongAge  
    {  
        super();  
        System.out.println("Enter son's age:");  
        sonAge = s.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 FatherSonAge
```

```
{  
    public static void main (String args[])
```

```
{  
    try
```

```
{  
        Son son = new Son();  
        son.display();  
    }  
}
```



```

        catch (WrongAge e)
        {
            System.out.println("Error: " + e.getMessage());
        }
    }
}

```

Output:

Enter Father's Age:

45

Enter Son's age:

20

Father's Age: 45

Son's Age: 20

Enter Father's Age:

56

Enter Son's age:

78

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

[Signature]
30.01.24