

Final Keyword Purposes

Final method

final method cannot override in a child class.

```
1 package com.finalpurpose;
2
3 public class FinalTestFather {
4
5     //Method with 'final' cannot override
6     public final String Hello() {
7         String s = "Hello";
8         return s;
9     }
10
11     public String GoodBye() {
12         String s = "GoodBye";
13         return s;
14     }
15
16 }
```

```
23 //CANNOT OVERRIDE THE METHOD Hello() BECAUSE IT IS FINAL METHOD
24
25 // @Override
26 // public final String Hello() {
27 //     String s = "Hello World";
28 //     return s;
29 // }
30
31 @Override
32 public String GoodBye() {
33     String s = "GoodBye World";
34     return s;
35 }
36 }
```

Final variable

Final variable is a constant, it cannot change its value and must be initialized.

```
6 //a variable with 'final keyword' is a constant
7 final int x = 1;
8 int w = 2;
9 //x' is final and y 'w' is not final
10
11 final int ChangeValueOfX() {
12     //we cannot change the value of X
13     //x = 2;
14     return x;
15 }
16
17 int ChangeValueOfW() {
18     //'w' unlike 'x' can change its value because don't have the 'final keyword'
19     w = 1;
20     return w;
21 }
```

Final Class

A final class is the last class in the inheritance, it cannot have children.

```
1 package com.finalpurpose;
2
3 //a class with 'final keyword' cannot inherit
4 public final class FinalTest extends FinalTestFather{
5
6 }
```

```
1 package com.finalpurpose;
2
3 // "FinalTest" cannot inherit because it has the 'final keyword'
4 public class FinalTestChild /*extends FinalTest*/{
5
6 }
```