Final Keyword in Java

The **final keyword** in java is used to restrict the user. The java final keyword can be used in many context. Final can be:

- 1. variable
- 2. method
- 3. class

The final keyword can be applied with the variables, a final variable that have no value it is called blank final variable or uninitialized final variable.

1. Java final variable

If you make any variable as final, you cannot change the value of final variable(It will be constant).

Example program:

```
class Bike9{
  final int speedlimit=90;//final variable
  void run(){
    speedlimit=400;
  }
  public static void main(String args[]){
    Bike9 obj=new Bike9();
    obj.run();
  }
}
```

Compile by: javac Bike9.java

Error:cannot assign value to a final variable speedlimit. speedlimit=400;

2. Java final method

If you make any method as final, you cannot override it.

Example of final method:

```
class Bike{
  final void run(){System.out.println("running");}
}

class Honda extends Bike{
  void run(){System.out.println("running safely with 100kmph");}

  public static void main(String args[]){
    Honda honda= new Honda();
    honda.run();
  }
}
```

Compile by: javac Honda.java

Error:run() in Honda can not override run() in Bike.

3. Java final class

If you make any class as final, you cannot extend it.

Example of final class:

```
final class Bike{}
class Honda1 extends Bike{
```

```
void run(){System.out.println("running safely with 100kmph");}

public static void main(String args[]){
  Honda1 honda= new Honda1();
  honda.run();
}
```

Compile by: javac Honda1.java

Error:cannot inherit from final Bike class Honda1 extends Bike{