

G-Fact 24 (final, finally and finalize in Java)

final: The final keyword in java has different meaning depending upon it is applied to variable, class or method.

- *Variables:* The value cannot be changed once initialized.
- *Method:* The method cannot be overridden by a subclass.
- *Class:* The class cannot be subclassed.

See [final keyword in Java](#) for Code examples of above three.

finally: The finally keyword is used in association with a try/catch block and guarantees that a section of code will be executed, even if an exception is thrown. The finally block will be executed after the try and catch blocks, but before control transfers back to its origin.

```
class Geek
{

    static void A()
    {
        try
        {
            System.out.println("inside A");
            throw new RuntimeException("demo");
        }
        finally
        {
            System.out.println("A's finally");
        }
    }

    static void B()
    {
        try
        {
            System.out.println("inside B");
            return;
        }
        finally
        {
            System.out.println("B's finally");
        }
    }
}
```

```

public static void main(String args[])
{
    try
    {
        A();
    }
    catch (Exception e)
    {
        System.out.println("Exception caught");
    }
    B();
}
}

```

Run on IDE

Output:

inside A A's finally Exception caught inside B B's finally

finalize: The automatic garbage collector call the finalize() method just before actually destroying the object. A class can therefore override the finalize() method from the Object class in order to define custom behavior during garbage collection. Syntax:

```

protected void finalize() throws Throwable { /* close open
files, release resources, etc */ }

```

Note that there is no guarantee about the time when finalize is called. It may be called any time after the object is not being referred anywhere (can be garbage collected).

This article is contributed by **Manav**. If you like GeeksforGeeks and would like to contribute, you can also write an article and mail your article to contribute@geeksforgeeks.org. See your article appearing on the GeeksforGeeks main page and help other Geeks.

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