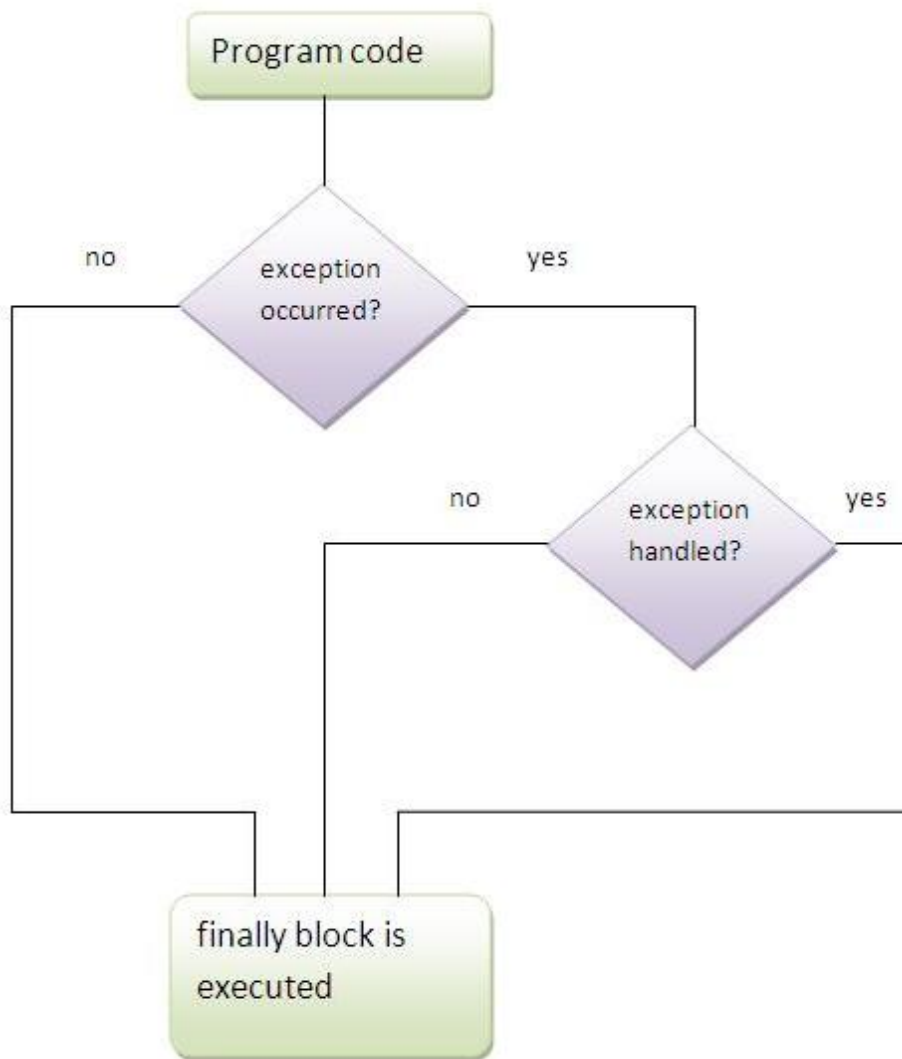


Java finally block

Java finally block is a block that is used *to execute important code* such as closing connection, stream etc.

Java finally block is always executed whether exception is handled or not.

Java finally block must be followed by try or catch block.



Note: If you don't handle exception, before terminating the program, JVM executes finally block(if any).

Why use java finally

- Finally block in java can be used to put "cleanup" code such as closing a file, closing connection etc.

Usage of Java finally

Let's see the different cases where java finally block can be used.

Case 1

Let's see the java finally example where **exception doesn't occur**.

```
class TestFinallyBlock{
    public static void main(String args[]){
        try{
            int data=25/5;
            System.out.println(data);
        }
        catch(NullPointerException e){System.out.println(e);}
        finally{System.out.println("finally block is always executed");}
        System.out.println("rest of the code...");
    }
}
```

Test it Now

Output:5
finally block is always executed
rest of the code...

Case 2

Let's see the java finally example where **exception occurs and not handled**.

```
class TestFinallyBlock1{
    public static void main(String args[]){
        try{
            int data=25/0;
            System.out.println(data);
        }
        catch(NullPointerException e){System.out.println(e);}
        finally{System.out.println("finally block is always executed");}
        System.out.println("rest of the code...");
    }
}
```

Test it Now

Output:finally block is always executed
Exception in thread main java.lang.ArithmeticException:/ by zero

Case 3

Let's see the java finally example where **exception occurs and handled**.

```
public class TestFinallyBlock2{  
    public static void main(String args[]){  
        try{  
            int data=25/0;  
            System.out.println(data);  
        }  
        catch(ArithmeticException e){System.out.println(e);}  
        finally{System.out.println("finally block is always executed");}  
        System.out.println("rest of the code...");  
    }  
}
```

Test it Now

```
Output:Exception in thread main java.lang.ArithmeticException:/ by zero  
        finally block is always executed  
        rest of the code...
```

Rule: For each try block there can be zero or more catch blocks, but only one finally block.

Note: The finally block will not be executed if program exits(either by calling `System.exit()` or by causing a fatal error that causes the process to abort).