

# Exceptions: Part II

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What is the difference between the `finally` block and just putting lines afterwards?

```
1  try{
2      System.out.println("try");
3      if (true) throw new Exception();
4  }
5  catch(Exception e){
6      System.out.println("catch");
7  }
8  finally{
9      System.out.println("finally");
10 }
11
12 System.out.println("afterwards");
```

true	false
try	try
catch	fin
{ fin	after }
after	

# Answer (Original)

```
1   for(int i = 0; i < 3; i++){
2       try{
3           System.out.println("try");
4           if (i > 0) throw new Exception();
5       }
6       catch(Exception e){
7           System.out.println("catch");
8           continue; //break;
9       }
10      finally{
11          System.out.println("finally");
12      }
13
14      System.out.println("afterwards");
15  }
```

try  
finally  
afterward  
try  
catch  
finally  
try  
catch  
finally

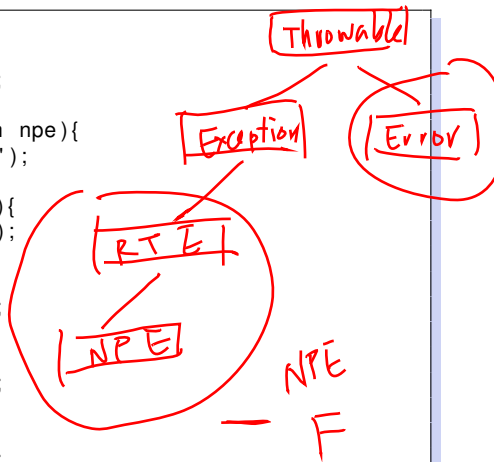
try  
catch

# Answer (Updated)

```
1      for(int i = 0; i < 3; i++){
2          try{
3              System.out.println("try");
4              if (i > 0) throw new Exception();
5          }
6          catch(Exception e){
7              System.out.println("catch");
8              return;
9          }
10         finally{
11             System.out.println("finally");
12         }
13
14         System.out.println("afterwards");
15     }
```

# Multiple Catchers

```
1  try{
2      Object o = null;
3      String s = o.toString();
4  }
5  catch (NullPointerException npe){
6      System.out.println("NPE");
7  }
8  catch (RuntimeException re){
9      System.out.println("RE");
10 }
11 catch (Exception e){
12     System.out.println("E");
13 }
14 catch (Error r){
15     System.out.println("R");
16 }
17 catch (Throwable t){
18     System.out.println("T");
19 }
20 finally{
21     System.out.println("F");
22 }
```



# Multiple Catchers

```
1  try{
2      Object o = null;
3      String s = o.toString();
4  }
5  catch (Throwable t){
6      System.out.println("T");
7  }
8  catch (Error r){
9      System.out.println("R");
10 }
11 catch (Exception e){
12     System.out.println("E");
13 }
14 catch (RuntimeException re){
15     System.out.println("RE");
16 }
17 catch (NullPointerException npe){
18     System.out.println("NPE");
19 }
20 finally {
21     System.out.println("F");
22 }
```

NPE

T

0/0

F

F

0/0

0/0

# Putting It All Together (from Java Tutorial)

```
1      public void WriteList(){
2          PrintWriter out = null;
3
4          try {
5              System.out.println("try");
6              out = new PrintWriter(
7                  new FileWriter("output.txt");
8              );
9              for (i=0; i<10; i++)
10                 out.println(vector.elementAt(i));
11          }
12          catch (ArrayIndexOutOfBoundsException e){
13              System.out.println(e);
14          }
15          catch (IOException e){
16              System.out.println("IO_Exception:" + e);
17          }
18          finally{
19              if (out != null)
20                 out.close();
21          }
22      }
```