

IOExceptions

IOExceptions are thrown when there is any input / output file operation issues while application performing certain tasks accessing the files. IOException is a **checked exception** and application developer has to handle in correct way.

IOException has many sub classes that are specific in nature. That means, when your application searching to read a file, if the file is not found that there is a `FileNotFoundException` to be thrown. `FileNotFoundException` is a subclass of `IOException`. Like this there are many subclasses defined in exception packages for handling the specific scenarios.

Few of the well known classes are:

- [FileNotFoundException](#)
- [EOFException](#)
- `SSLException`
- `UnsupportedEncodingException`
- `SocketException`

IOException Example

Here is simple example for IOException:

```
1 import java.io.File;
2 import java.io.FileInputStream;
3 import java.io.IOException;
4
5 public class ExceptionExample {
6     public FileInputStream testMethod1() {
7         File file = new File("test.txt");
8         FileInputStream fileInputStream = null;
9         try{
10             fileInputStream = new FileInputStream(file);
```

```

11         fileInputStream.read();
12     }catch (IOException e){
13         e.printStackTrace();
14     }
15     finally{
16         try{
17             if (fileInputStream != null){
18                 fileInputStream.close();
19             }
20         }catch (IOException e){
21             e.printStackTrace();
22         }
23     }
24     return fileInputStream;
25 }
26 public static void main(String[] args){
27     ExceptionExample instance1 = new ExceptionExample();
28     instance1.testMethod1();
29 }
30 }

```

When you run the above program where there is no file present in the file system, you would get the following exception:

```

1 java.io.FileNotFoundException: test.txt (The system cannot find the file
  specified)
2     at java.io.FileInputStream.open(Native Method)
3     at java.io.FileInputStream.<init>(FileInputStream.java:138)
4     at logging.simple.ExceptionExample.testMethod1(ExceptionExample.java:12)
5     at logging.simple.ExceptionExample.main(ExceptionExample.java:30)

```

This is one of the IOException, but depends on the different problems in reading the file, your application may throw some other IOExceptions.