**EXCEPTION HANDLING**

* The exception is nothing but the runtime error which will occur during execution time.
* It will stop the code abnormally.
* If an exception happens in the program the execution will stop then and there itself.
* Object 🡪 Throwable 🡪 Error and Exception.
* Exception and Error are the direct child class for Throwable.
* We can handle Exception, but we can’t be able to handle Error.
* Using try and catch block we can handle exception.
* In try block you can give your statement and in catch block you must specify the error in the parameter and inside the catch block you can give your error message.
* For single try block you can have n number of catch blocks.
* Only the matching catch block will get executed.
* If you have multiple statements in the try block, it will check for the first statement which has error. Once it finds the first error statement, the next all statements will be ignored.
* If the try block throws an error and the catch block doesn’t have the relevant catch block, then it will stop the execution abnormally.
* To overcome this issue, we should use global catch block at the end.
* We should not place them in the middle because the rest of the catch block will become unreachable.
* We can also make a catch block for Error and Throwable and that should be at the end.
* The order will be like Exception catch block 🡪 Error catch block 🡪 Throwable catch block.

**FINALLY:**

* Finally block will execute even if the try catch block is not executed.
* It is majorly used for freeing the memory, releasing the resources and to close my application smoothly
* We must make sure that the finally block is at the end of the try catch block.

**TYPES OF EXCEPTION:**

* **There are two types of exception**
  + **Checked exception.**
  + **Unchecked exception.**

Checked exception:

* Checked exception are nothing but the exceptions which we must handle them.
* If you open a file and the file is not found, then it will through file not found exception and that is shown by your compiler. So, these exceptions are known as Checked Exception.

Unchecked Exception:

* Unchecked exceptions will happen during runtime.

**THROWS:**

* Throws is used to declare the exception. It tells the compiler that the method may throw this exception.
* It can only be used with a method signature.
* We cannot rectify the exception, but we can just skip and follow our business logics.

**Garbage Collector:**

* For every object creation constructor will get executed.
* For every object deletion garbage collector will invoke the finalize method automatically.
* Finalize is a predefined method from object class.
* As a programmer we should request jvm to execute garbage collector using System.gc() or Runtime.getRuntime().gc()