**Assignment**

# Question: List out 10 types of Java Exception and their meaning.

1. **NullPointerException:** Java throws this exception whenever your application references a null variable.
2. **NumberFormatException:** Java throws this exception when an application tries to convert a**String** into a number and fails.
3. **IllegalArgumentException:** In Java, an IllegalArgumentException is a runtime exception that is thrown when a method receives an argument that is invalid or inappropriate for that method.
4. **ClassCastException:** This type of exception occurs when your application casts one type to another and fails.
5. **OutOfMemoyError:** An **OutOfMemoryError** is what it sounds like. If your application is using too much memory, you will see this exception.
6. **StackOverflowError:** One of the hardest exceptions to debug is a **StackOverflowError**. These can be quite tricky since they by definition are ones where the runtime can’t give you the full stack trace.
7. **SQLException: SQLException** is also a parent exception. It encapsulates any error caused when communicating with a SQL database.
8. **IllegalStateException:** In Java, an IllegalStateException is a runtime exception that is thrown when a method is invoked at an inappropriate time, or when the object is in an invalid state.
9. **ArrayIndexOutOfBoundException:** Thrown when an application attempts to access an array element with an index that is outside the bounds of the array.
10. **FileNotFoundException:** Thrown when a file with the specified pathname does not exist.