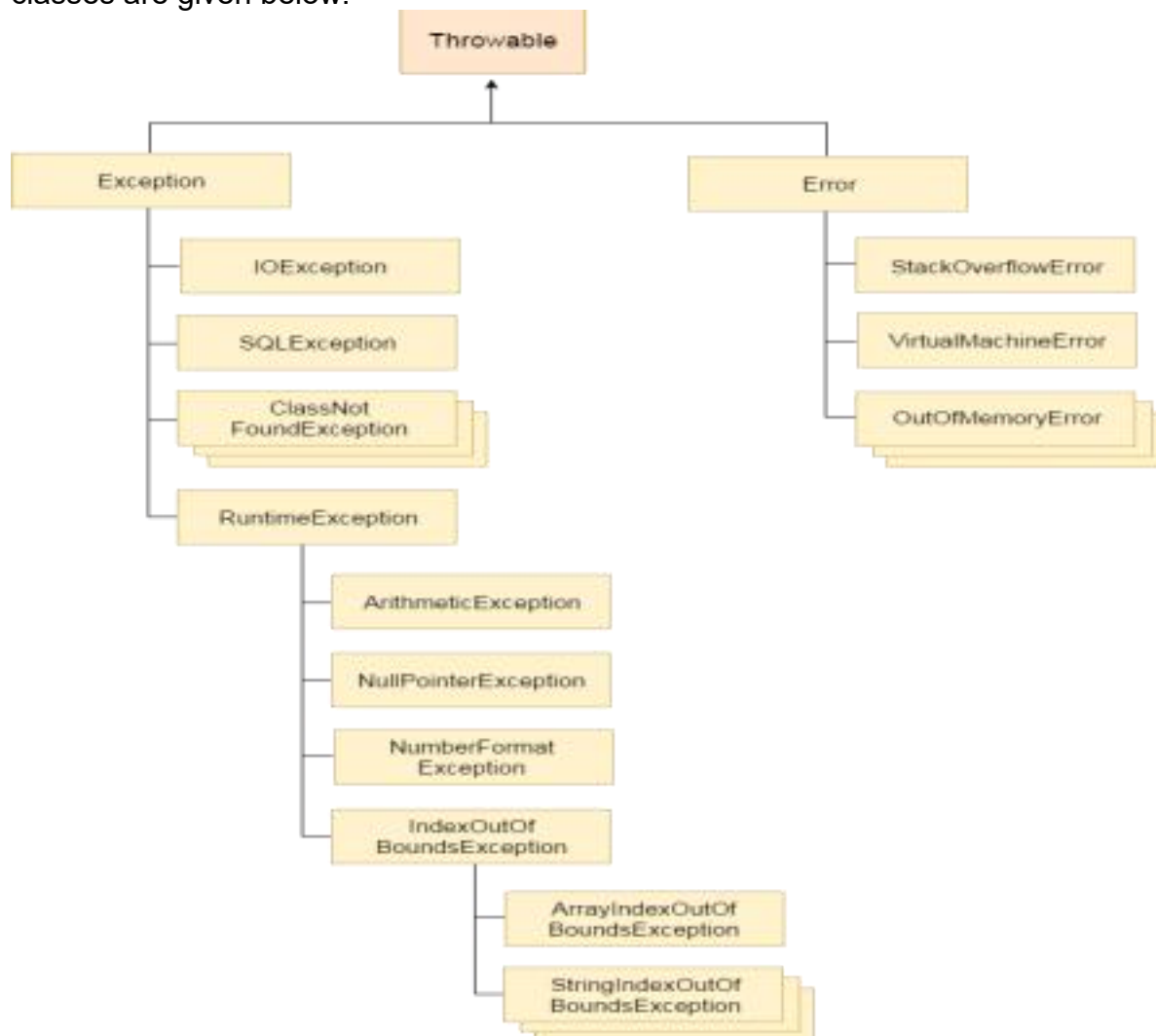


## Week 3- Session 4 Interview Questions

### 1. Explain the hierarchy of Java Exception classes?

The `java.lang.Throwable` class is the root class of Java Exception hierarchy which is inherited by two subclasses: `Exception` and `Error`. A hierarchy of Java Exception classes are given below:



### 2. What are runtime exceptions in Java? Give an example.

The exceptions which occur at run time are called runtime exceptions. These exceptions are unknown to the compiler. All subclasses of `java.lang.RuntimeException` and `java.lang.Error` are runtime exceptions. These exceptions are unchecked type of exceptions. For example,

NumberFormatException, NullPointerException, ClassCastException, ArrayIndexOutOfBoundsException, StackOverflowError etc.

### **3. What is OutOfMemoryError in Java?**

OutOfMemoryError is the subclass of java.lang.Error which occurs when JVM runs out of memory.

### **4. What is Re-throwing an exception in Java?**

Exceptions raised in the try block are handled in the catch block. If it is unable to handle that exception, it can re-throw that exception using throw keyword. It is called re-throwing an exception.

### **5. What is the use of throws keyword in Java?**

throws keyword is used to specify the exceptions that a particular method can throw. The syntax for using throws keyword is,

```
return_type method_name(parameter_list) throws exception_list {  
    //some statements  
}
```

### **6. Can an exception be rethrown?**

Yes

### **7. Does catch block rethrow an exception in java?**

Yes, catch block can rethrow an exception using throw keyword. It is called re-throwing an exception.

### **8. What are Types of Exception in Java**

Exceptions can be categorized into two ways:

#### **1. Built-in Exceptions**

- o Checked Exception

- o Unchecked Exception

#### **2. User-Defined Exceptions**

