**Exception Handling**

What is the difference between a checked exception and an unchecked exception in java?

* The exceptions which are checked by the compiler during the compile-time are called as checked exceptions.

Examples: IOException, SQLException, UserException etc.

All exceptions except Error, RuntimeException and their subclasses are checked exceptions.

* The exceptions which are not checked by the compiler during the compile-time and which occur at runtime are called as runtime exceptions.

Examples: ArithmeticException, NullPointerException, NegativeArraySizeException etc.

All exceptions that are subclasses of RuntimeException class are runtime exceptions.

2. Which of the following class is not a subclass of the Exception class?

IOError

**✓ Correct**

**Feedback:**

IOError class is a direct subclass of the Error class which is not a subclass of the Exception class. So IOError is not a subclass of the Exception class.

3. Which of the following exception is not a checked exception?

ArrayIndexOutOfBoundException

**✓ Correct**

**Feedback:**

RuntimeExceptions are not checked while compilation. ArrayIndexOutOfBoundException class is a direct subclass of IndexOutOfBound class which is a direct subclass of RuntimeException class, so it is an unchecked exception.

4. Which of the following exception is thrown in the code snippet below?

**int** x = **100**/**0**;



ArithmeticException

**✓ Correct**

**Feedback:**

ArithmeticException is thrown when an exceptional arithmetic condition like divide by zero has occurred.

5.