CS 249: Assignment 7

Exception Handling and Text I/O

Theory Questions (14%)

1. (2%) Write the line of Java code to throw a new ArithmeticException with the message "Division by zero".

    throw new ArithmeticException("Division by zero");

2. (2%) Given the code below, what will print out?

    ```
    try {
        throw new ArithmeticException();
    }
    catch(RuntimeException ex) {
        System.out.println("RUNTIME");
    }
    catch(Exception ex) {
        System.out.println("EXCEPTION");
    }
    ```
                                                RUNTIME

3. (2%) Given the code below, what will print out?

    ```
    try {
        throw new IOException();
    }
    catch(RuntimeException ex) {
        System.out.println("RUNTIME");
    }
    catch(Exception ex) {
        System.out.println("EXCEPTION");
    }
    ```
                        EXCEPTION

4. (2%) If an exception is an **unchecked** exception, what classes does it inherit from?

    Exception Class

5. (2%) Write a method named "myMethod" that takes no parameters, is public, returns nothing, and **declares an IOException**. The body of this method should be empty. You also do NOT need to define the containing class.

```
public void myMethod() {
    IOException ex = new IOException();
}
```

6. (2%) Given the code below, what will print out?   EXCEPTION
                                                        HOW ARE YOU?

```
try {
    System.out.println("HI");
    return;
}
catch(RuntimeException ex) {
    System.out.println("RUNTIME");
}
catch(Exception ex) {
    System.out.println("EXCEPTION");
}
finally {
        System.out.println("HOW ARE YOU?");
}
```

7. (2%) Creating an instance of a File class will create the corresponding file.

   (a) True
   (b) False

                                                (b) False