

## Quiz 6 – CS 102

Name: \_\_\_\_\_, ID: \_\_\_\_\_

a) What are checked and unchecked exceptions? How could one create a new unchecked exception in Java?

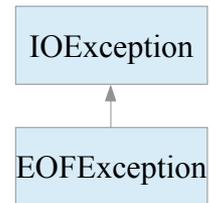
b) Print the output of the following code. 10 points.

```
public static void main(String[] args) {
    System.err.println("MS");
    level0();
    System.err.println("ME");
}
static void level0() {
    System.err.println("LOS");
    try {
        level1();
    } catch(RuntimeException e) {
        System.err.println("LOX");
    }
    System.err.println("LOE");
}
static void level1() {
    System.err.println("L1S");
    try {
        level2();
    } catch(ArithmeticException e) {
        System.err.println("L1X");
        throw e;
    }
    System.err.println("L1E");
}
static void level2() {
    System.err.println("L2S");
    try {
        level3();
    } catch(NullPointerException e) {
        System.err.println("L2C");
    } finally {
        System.err.println("L2F");
    }
    System.err.println("L2E");
}
static void level3() {
    System.err.println("L3S");
    int n = 3/0;
    System.err.println(n);
    System.err.println("L3E");
}
```

Print the answer below:

c) What is wrong with the following code and how would you fix it?

```
try {  
    foo();  
} catch(IOException e) {  
    ...  
} catch(EOFException e) {  
    ...  
}
```



d) Create a new checked exception class called `JobFailedException`, it should take a `String` `reason` and `int` `jobId` as arguments. Create a new message for the exception using these two arguments. You should not implement any methods other than the constructor.