

YOUR PROGRAM IS NOT WORKING?

ERROR VS EXCEPTION!

An **Error** “indicates serious problems that a reasonable application should not try to catch”

VS

An **Exception** “indicates conditions that a reasonable application might want to catch”

● KEEP CALM ●

YOU HAVE EXCEPTION HANDLING

WHAT IS EXCEPTION?

An Exception is an event, which occurs during the execution of a program, that disrupts the normal flow of the program’s instructions

EXCEPTION’S KEYWORD

Try

Used to specify a block where we should place the exception code

```
try {
    foo1();
}
```

Catch

Used to handle the exception. It must be preceded by try block

```
catch (ArithmeticException e) {
    foo2();
}
```

Finally

Used to execute the important code of the program. It is executed whether an exception is handled or not

```
finally {
    foo3();
}
```

Throw

Used to throw an exception

```
foo4() {
    throw new MyException(e);
}
```

Throws

Specifies that there may occur an exception in the method

```
foo5 throws Exception {
    foo1();
}
```

KIND OF EXCEPTION

ArrayIndexOutOfBoundsException

Arithmetic Exception

ClassNotFoundException

FileNotFoundException

IOException

InterruptedException

NoSuchMethodException

NoSuchFieldException

NullPointerException

NumberFormatException

RuntimeException

StringIndexOutOfBoundsException



EXAMPLE CODE

```
1 class foo {
2     public static void main(String args[]) {
3         int a = 1, b = 0, c[] = new int[0];
4         // check division by zero
5         try {
6             a = a/b;
7         }
8         catch(ArithmeticException e) {
9             System.out.println("Arithmetic exception occur");
10        }
11        finally {
12            System.out.println("This line always execute");
13        }
14        // check index 1 in c
15        try {
16            a = c[1];
17        }
18        catch(Exception e) {
19            throw new IndexOutOfBoundsException("Index out of bounds");
20        }
21    }
22 }
23 }
```

CHECKED VS UNCHECKED EXCEPTION?

Checked exceptions are checked at compile-time

Unchecked exceptions aren’t checked at compile-time, but they are checked at runtime

REFERENCES

<http://bit.ly/AllTheReferences>