EXERCISES – SCALA DAY 1 PART 1

The REPL

1.

```
val a = 17
println(a)
```

2. a = 17 results in error message : **reassignment to val**

3.

```
val letters = "ABC1234"
println(letters)
```

4. letters = "DEF1234" results in error message : **reassignment to val**

5.

```
val c = 15.56
println(c)
```

Expressions

1. `if(sunny && temperature > 80) true`

2. `if((sunny || partly_cloudy) && temperature > 80) true`

3. `if((sunny || partly_cloudy) && (temperature > 80 || temperature <20)) true`

4. `val Celsius = (Fahrenheit - 32) * 5 / 9.0`

5. `val Fahrenheit = Celsius * 9 / 5 + 32`

Methods

1.

```
def getSquare(num1: Int ): Int = {
                num1 * num1
}
val a = getSquare(3)
assert(a==math.pow(3,2))

val b = getSquare(6)
assert(b==math.pow(6,2))

val c = getSquare(5)
assert(c==math.pow(5,2))
```

2.

```
def isArg1GreaterThanArg2(num1: Double, num2: Double ): Boolean = {
                        if (num1 > num2) true else false
}

val t1 = isArg1GreaterThanArg2(4.1, 4.12)
assert(!t1)

val t2 = isArg1GreaterThanArg2(2.1, 1.2)
assert(t2)
```

3.

```
def manyTimesString(var1: String, num2: Int ): String = {
                        var1 * num2
}

println(manyTimesString("abc", 3))

val m1 = manyTimesString("abc", 3)
assert("abcabcabc" == m1, " Many times string test: abc")

val m2 = manyTimesString("123", 2)
assert("123123" == m2, "Many times string test: 123")
```

Classes and Objects

1.

```
val r1 = 0 until 11
println(r1.step)
```

same as

```
val r1 = 1 to 10
```

This prints 1

```
val r2 = 1 to 10 by 2
println(r2.step)
```

This prints 2

2.

```
var s1 = "Sally"
var s2 = "Sally"

if(s1.equals(s2)) println("s1 and s2 are equal") else println("s1 and s2 are not equal")
```

This prints “s1 and s2 are equal”