

# SCS2204 Functional Programming

## Lab sheet 04

Index Number: 21000557

- ❖ Please note that the Scala files are located in src/main/scala folder.
- ❖ GitHub Link: [https://github.com/ItsAeox/UCSC\\_FP\\_labsheet\\_04](https://github.com/ItsAeox/UCSC_FP_labsheet_04)
- ❖ Screenshots for the code are given below.

1.

```
src > main > scala > Q01.scala > interest

1  @main def Question_01: Unit =
2      println("Enter the deposit amount : ")
3      var dep = scala.io.StdIn.readDouble()
4      var inter = interest(dep)
5      println(f"Interest for $dep%1.2frs is $inter%1.2frs")
6
7
8  def interest(dep: Double): Double = {
9      if(0 > dep){
10         0
11     } else if(0 < dep && dep <= 20000){
12         0.02 * dep
13     } else if(20000 < dep && dep <= 200000){
14         0.04 * dep
15     } else if(200000 < dep && dep <= 2000000){
16         0.035 * dep
17     } else {
18         0.065 * dep
19     }
20 }
```

2.

```
src > main > scala > Q02.scala > check
run | debug

1  @main def Question_02: Unit =
2      println("Enter the Interger : ")
3      var inp = scala.io.StdIn.readInt()
4      check(inp)
5
6  def check(value: Int): Unit = {
7      if(0 > value){
8          println("Negative/Zero Input")
9      } else if(value%2 == 0){
10         println("Even number is given")
11     } else if(value%2 == 1){
12         println("Odd number is given")
13     }
14 }
```

3.

src > main > scala >  Q03.scala >  toUpper

run | debug

```
1  @main def Question_03: Unit = {
2      val name1 = "Benny"
3      val name2 = "Niroshan"
4      val name3 = "Saman"
5      val name4 = "Kumara"
6
7      println(formatNames(name1, toUpper))
8      println(formatNames(name2, toUpper))
9      println(formatNames(name3, toLower))
10     println(formatNames(name4, toLower))
11 }
12
13
14 def toUpper(str: String): String = {
15     str.toUpperCase()
16 }
17
18 def toLower(str: String): String = {
19     str.toLowerCase()
20 }
21
22 def formatNames(name: String, formatter: String => String): String = {
23     formatter(name)
24 }
```