SCS 2204 - Functional Programming
Scala Practical – 09

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q1.scala

```scala
object q1 {

    def main(args: Array[String]): Unit = {
        println("Enter the deposit money:")
        val userinput = scala.io.StdIn.readLine()
        val interestAmount = interest(userinput.toDouble)
        println(s"The actual amount of interest is: $interestAmount")
    }

    def interest(deposit: Double): Double = {
        val interestRate: Double => Double = deposit match {
            case d if d <= 20000 =>  _ => 0.02
            case d if d <= 200000 =>  _ => 0.04
            case d if d <= 2000000 =>  _ => 0.035
            case _ =>  _ => 0.065
        }

        deposit * interestRate(deposit)
    }

}

```

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   GITLENS

sakuna@Sakunas-MacBook-Air labsheet9 % scalac q1.scala && scala q1
Enter the deposit money:
40000
The actual amount of interest is: 1600.0
sakuna@Sakunas-MacBook-Air labsheet9 % scalac q1.scala && scala q1
Enter the deposit money:
55000
The actual amount of interest is: 2200.0
sakuna@Sakunas-MacBook-Air labsheet9 %
```

q2.scala

```scala
object q2 {

    def main(args: Array[String]): Unit = {
        println("Enter the integer:")
        val input = scala.io.StdIn.readLine()
        val value = input.toInt
        integer(value)
    }

    def integer(value: Int): Unit = {
        value match {
            case d if d <= 0 => println("Negative/Zero")
            case d if d % 2 == 0 => println("Even number")
            case d if d % 2 != 0 => println("Odd number")
            case _ => println("Invalid value")
        }
    }

}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL GITLENS

```
sakuna@Sakunas-MacBook-Air labsheet9 % scalac q2.scala && scala q2
Enter the integer:
12
Even number
sakuna@Sakunas-MacBook-Air labsheet9 % scalac q2.scala && scala q2
Enter the integer:
13
Odd number
sakuna@Sakunas-MacBook-Air labsheet9 %
```

q3.scala

```scala
object q3 {
    def toUpper(name: String): String = {
        name.toUpperCase()
    }

    def toLower(name: String): String = {
        name.toLowerCase()
    }

    def formatNames(name: String)(format: String => String): String = {
        format(name)
    }

    def main(args: Array[String]): Unit = {

        println(formatNames("Benny")(toUpper))
        println(formatNames("Niroshan")(name => {
            val firstTwo = name.substring(0, 2).toUpperCase
            val rest = name.substring(2).toLowerCase
            firstTwo + rest
        }))
        println(formatNames("Saman")(toLower))
        println(formatNames("Kumara")(name => {
            val firstFive = name.substring(0, 5).toLowerCase
            val lastOne = name.substring(5).toUpperCase
            firstFive + lastOne
        }))
    }
}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL GITLENS

```
sakuna@Sakunas-MacBook-Air labsheet9 % scalac q3.scala && scala q3
BENNY
NIroshan
saman
kumarA
sakuna@Sakunas-MacBook-Air labsheet9 %
```