Tutorial 2

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Question 1

```scala
object Q1 {
    def calInterest(depositAmount: Double): Double = {

      if (depositAmount <= 20000)
        depositAmount * 0.02
      else if (depositAmount <= 200000)
        depositAmount * 0.04
      else if (depositAmount <= 2000000)
        depositAmount * 0.035
      else
        depositAmount * 0.065
    }

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

    println(calInterest(10000))
    println(calInterest(100000))
    println(calInterest(1000000))
    println(calInterest(10000000))
    }

}
```

```
PS C:\Users\aamir\OneDrive\Desktop\New folder\Semester 3\Scala\Scala 4> scalac Q1.scala
PS C:\Users\aamir\OneDrive\Desktop\New folder\Semester 3\Scala\Scala 4> scala Q1
200.0
4000.0
35000.0
650000.0
```

Question 2

```scala
object Q2 {
  def main(args: Array[String]): Unit = {
    println("Enter a number : ")
    val input = scala.io.StdIn.readLine().toInt

    input match {
      case n if n < 0 => println("input is Negative")
      case n if n == 0 => println("input is zero")
      case n if n % 2 == 0 => println("Even number ")
      case n if n % 2 == 1 => println("Odd number ")
    }
  }
}
```

```
PS C:\Users\aamir\OneDrive\Desktop\New folder\Semester 3\Scala\Scala 4> scala Q2
Enter a number :
0
input is zero
PS C:\Users\aamir\OneDrive\Desktop\New folder\Semester 3\Scala\Scala 4> scala Q2
Enter a number :
2
Even number
PS C:\Users\aamir\OneDrive\Desktop\New folder\Semester 3\Scala\Scala 4> scala Q2
Enter a number :
3
Odd number
PS C:\Users\aamir\OneDrive\Desktop\New folder\Semester 3\Scala\Scala 4> scala Q2
Enter a number :
-4
input is Negative
PS C:\Users\aamir\OneDrive\Desktop\New folder\Semester 3\Scala\Scala 4>
```

Question 3

```scala
object Q3{

    def main(args: Array[String]) = {
        println(formatNames("Benny")()(toUpper));
        println(formatNames("Niroshan")(1)(toUpper));
        println(formatNames("Saman")()(toLower));
        println(formatNames("Kumara")(5)(toUpper));
    }

    def toUpper(name:String):String = name.toUpperCase();
    def toLower(name:String):String = name.toLowerCase();

    def formatNames(name:String)( list: Int*)(function: String => String): String = {
        if (list.isEmpty){
            return function(name);
        }

        var temp = "";
        var i=0;
        while(i<name.length()){
            if(list.contains(i)) temp = temp+ function(name.charAt(i).toString);
            else temp=temp+name.charAt(i).toString;
            i=i+1;
        }
        return temp;

    }
}
```

```
PS C:\Users\aamir\OneDrive\Desktop\New folder\Semester 3\Scala\Scala 4> scalac Q3.scala
PS C:\Users\aamir\OneDrive\Desktop\New folder\Semester 3\Scala\Scala 4> scala Q3
BENNY
NIroshan
saman
KumarA
```