LAB-4

Q1.

```
/*
Program that takes two numbers as parameters
and returns the Maximum and Minimum of them.
            (Use Single Nested Function)
*/

object Lab_4_1 {
def main(args: Array[String])
{
  println("Maximum & Minimum")
  MAX_MIN(25,75)
}
def MAX_MIN( a:Int, b:Int)
{
  def Max()
  {
    if(a>b)
      println("Max : "+a)
```

```
    else
      println("Max : "+b)
  }
  def Min()
  {
    if(a<b)
      println("Min : "+a)
    else
      println("Min : "+b)
  }
  Max()
  Min()
}
}
```

Console ×

<terminated> Lab_4_1$ [Scala Application] C:\Program Files\Java\jre1.8.0_301\bin\javaw.exe (07-Aug-2021, 4:08:31 PM)

```
Maximum & Minimum
Max : 75
Min : 25
```

Q2.

```
/*
Program that takes two numbers as parameters
and returns the Maximum and Minimum of them.
                (Use Multi Nested Function)
*/
object Lab_4_2 {
def main(args: Array[String])
{
  println("Maximum & Minimum")
 MAX_MIN(15,10)
}
def MAX_MIN( a:Int, b:Int)
{
   def MAX()
   {
     def Max()
     {
       if(a>b)
       println("Max : "+a)
       else
```

```
        println("Max : "+b)
      }
    }
    def MIN()
    {
      def Min()
      {
        if(a<b)
        println("Min : "+a)
        else
        println("Min : "+b)
      }
    }
    MAX()
    MIN()
 }
 }
```

```
Maximum & Minimum
Max : 15
Min : 10
```

Q3.

```
/*
Program in scala to check the number is even or odd
                (Single Nested Function)
*/

object Lab_4_3 {
def main(args: Array[String])
{
  Even_Odd(10)
}
def Even_Odd(l:Int)
{
  def Func()
  {
  if(l%2==0)
  {
    println("Even")
  }
  else
  {
```

```
  {
    println("Odd")
  }
}
Func()
}
}
```

Console

<terminated> Lab_4_3$ [Scala Application] C:\Program Files\Java\jre1.8.0_301\bin\javaw.exe (07-Aug-2021, 4:17:06 PM)

```
Even
```

Q4.

```scala
/*
Program in scala to check the number is even or odd
                (Multiple Nested Function)
*/

object Lab_4_4 {
def main(args: Array[String])
{
  Even_Odd(11)
}
def Even_Odd(l:Int)
{
  def Function()
  {
  def Func()
  {
  if(l%2==0)
  {
```

```
  {
    println("Even")
  }
  else
  {
    println("Odd")
  }
}
Func()
}
}
}
```

Console ×

<terminated> Lab_4_4$ [Scala Application] C:\Program Files\Java\jre1.8.0_301\bin\javaw.exe (07-Aug-2021, 4:19:21 PM)

```
Odd
```

Q5.

```
/*
Practice first class functions for below scenarios :
a. Adding one to an integer value
b. Check integer value is 0 or not
c. Add,multiply two numbers
*/

object Lab_4_5 {
  def main(args:Array[String])
  {
      Increment(5)
      Integer(1)
      AddMul(5,5)
  }
  def Increment(I:Int)
  {
    var J = I
    J+=1
```

```
    println("Incremented Value: "+J)
  }
  def Integer(I:Int)
  {
    if(I==0)
      println("Integer Value is Equal to Zero")
    else
      println("Integer Value is Not Equal to Zero")
  }
  def AddMul(A:Int,B:Int)
  {
    var C,D =0
    C = A + B
    D = A*B
    println("Addition of Numbers is " + C)
    println("Multiplication of Numbers is " + D)
  }
}
```

```
Incremented Value: 6
Integer Value is Not Equal to Zero
Addition of Numbers is 10
Multiplication of Numbers is 25
```