SCALA TUTORIAL 3

Visit my GitHub Repository:

https://github.com/virajSandakelum/SCS2204-FUNCTIONAL-PROGRAMMING

Question 01

```scala
object Question_1 {

  def areaOfDisk(r:Double): Double =  math.Pi * r * r

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

    println("The area of a disk with radius 5 :" +
areaOfDisk(5))

    print("Enter the radius of the Disk:")
    val radius = scala.io.StdIn.readFloat()
    println("The area of a disk with radius "+ radius + " :" +
areaOfDisk(radius))
  }
}
```

Question 02

```scala
object Question_2 {
  def celsiusToFahrenheit(celsius :Double): Double =
  {
    celsius  * 1.8000 + 32.00
  }

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

    println(celsiusToFahrenheit(35))

    print("Enter the Celsius  Temperature :")
    val celsius  = scala.io.StdIn.readFloat()
    println(celsiusToFahrenheit(celsius))


  }
}
```

Question 03

```scala
object Question_3 {

  def volumeOfSphere(r:Double):Double = (4/3) * math.Pi * r * r
* r

  def main(args:Array[String]):Unit=
  {
    println(volumeOfSphere(5))


    print("Enter the radius of a sphere:")
    var radius = scala.io.StdIn.readDouble()
    println(volumeOfSphere(radius))
  }
}
```

Question 04

```scala
object Question_4 {

    def priceForAllBooks(numberOfCopies:Int):Double = 24.95 *
numberOfCopies

    def getDiscount(totalBookPrice:Int):Double = totalBookPrice
* 0.3

    def shipCost(numberOfCopies:Int):Double= numberOfCopies
match {
      case x if x > 50 => 50 * 3 + (x-50) * 0.75
      case x if x <= 50 => numberOfCopies * 3
    }

    def totalWholesaleCost(numberOfCopies:Int):Double=
    {
      priceForAllBooks(numberOfCopies) +
shipCost(numberOfCopies) - getDiscount(numberOfCopies)
    }


    def main(args:Array[String]):Unit=
    {
      println(totalWholesaleCost(60))


      print("Enter the total amount of books :")
      val numberOfBook = scala.io.StdIn.readInt()
      println("Total wholesale cost for book copies:" +
totalWholesaleCost(numberOfBook) )
    }

}
```

Question 05

```scala
object Question_5 {

    def easyPaceTime(kilometer:Int):Int=
    {
        kilometer * 8
    }

    def tempoTime(kilometer:Int):Int=
    {
        kilometer * 7
    }

    def main(args:Array[String]):Unit=
    {
        val totalRunningTime = easyPaceTime(2) + tempoTime(3) +
easyPaceTime(2)
        println("Total Running Time :"+totalRunningTime)
    }
}
```

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