Session 15 Assignment 2

Question 1:

Write a partial function to add three numbers in which one number is constant and two numbers can be passed as inputs and define another method which can take the partial function as input and squares the result.

```
/**
 * Author - Deepak Ray
 * Date - 08/05/2018
 * Description - BigData_Session15Assignment2 (question 1)
 *               Program to demonstrator partial function
 */

import java.util.Scanner;
object Session15Assignment2_1 {
  //function for perform square of passed number
  def calSquare(x:Int) = x*x

  //function to add two numbers which are passed and a constant 5 will get added to it
  val sumnumbers: PartialFunction[Int, Int] = {

    case x: Int if x >= 0 => x + 5
  }
  def main(args: Array[String]) {
    var scan: Scanner = new Scanner(System.in);
    //Accept first number
    print("Enter first number:");
    var firstNumber: Int = scan.nextInt();

    //Accept Second Number
    print("Enter Second Number:");
    var secondNumber: Int = scan.nextInt();

    //Call the sumnumbers function to perform addition and this will be input to calcsquare method.
    println(calSquare(sumnumbers(firstNumber + secondNumber)))
    scan.close()
  }
}
```

So, here, there is a function sumnumbers, which take two numbers are input and add a constant 5 to them. This function itself is input to function calcsquare which will calculate the square of the passed number.

So, if we have passed, 7 & 5 then the output will of square of 7+9+5 = 21 and 21*21=441

```
[bigdata@10 bin]$ scala /home/bigdata/deepak/docs/Acadgild/Session15Assignment2/Session15Assignment2_1.scala
Enter first number:7
Enter Second Number:9
441
[bigdata@10 bin]$
```

Question 2:

Write a program to print the prices of 4 courses of Acadgild: Android-12999,Big Data Development-17999,Big Data Development-17999,Spark-19999 using match and add a default condition if the user enters any other course.

```scala
/**
 * Author - Deepak Ray
 * Date - 08/05/2018
 * Description - BigData_Session15Assignment2 (question 2)
 *               Display multiple choice and default value
 */

object Session15Assignment2_2 {
  def main(args: Array[String]) {
    println(matchTest("Android"))
    println(matchTest("Big Data Development"))
    println(matchTest("Spark"))
    println(matchTest("Core Java"))
  }

  def matchTest(course: Any): Any = course match {
    case "Android"             => course + "-12999"
    case "Big Data Development" => course + "-17999"
    case "Spark"               => course + "-19999"
    case _                     => "Invalid Course"
  }
}
```

```
[bigdata@10 bin]$ scala /home/bigdata/deepak/docs/Acadgild/Session15Assignment2/Session15Assignment2_2.scala
Android-12999
Big Data Development-17999
Spark-19999
Invalid Course
[bigdata@10 bin]$
```