Problem Statement

- 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.
- 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.

Solution:

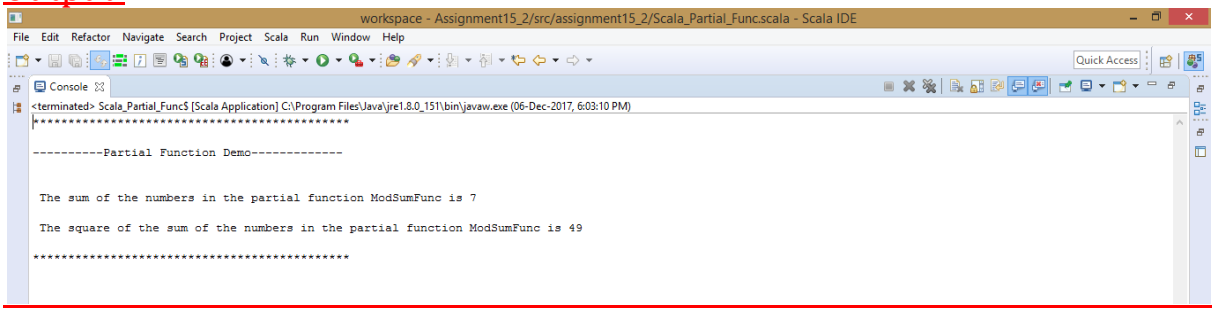
- A partial function to add three numbers in which one number is constant and two numbers can be passed as inputs and define another method which can take the partial function as input and squares the result.

Code:

Scala_Partial_Func.scala

```
package assignment15_2
//program to find sum and square of numbers using partial function

object Scala_Partial_Func
{
  //Method origSumFunc() performs sum of three numbers
  private def origSumFunc(a:Int, b:Int, c:Int) = a + b + c

  //Method modSumFunc calls method 'origSumFunc and provide one argument as
constant (First value)
  private def modSumFunc = origSumFunc(1, _:Int , _:Int)

  //Method sqrFunc takes Method SumFunc as argument
  def sqrFunc (SumFunc :(Int) => Int):Unit=
  {
    //method call to SumFunc and provides another argument (Third value)
    val sum = SumFunc(4) //Result of Sum

    //Perform square on the result of SumFunc
    val square:Int=sum * sum //Result of Square

    //Displaying Result of sum and square
    println(s"\n The sum of the numbers in the partial function ModSumFunc
is $sum ")
    println(s"\n The square of the sum of the numbers in the partial
function ModSumFunc is $square  \n ")
  }
  //Main Method
  def main(args:Array[String]):Unit =
  {
    println("*********************************************")
    println()
    println("----------Partial Function Demo-------------")
    println()

    //Function call to method sqrFunc that takes method modSumFunc as
argument
    //modSumFunc is call with an argument passed (Second value)
    sqrFunc(modSumFunc(2,_))
    println("*********************************************")
  }
}
```

Output:



- 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.

Code:

Scala_Match.scala

```
package assignment15_2
//program to check prices of courses available at Acadgild using match
object Scala_Match
{

  //Method to print prices of 4 courses of Acadgild
  def printCourseDetails(course: String):String=course match
  {
    //Match case condition for the 4 courses of Acadgild
    case "Android"=>"Android Course Price - 12999"
    case "Big Data Development"=>"Big Data Development Course Price -
17999"
    case "Big Data Development"=>"Big Data Development Course Price -
17999"
    case "Spark"=>"Spark Course Price - 19999"

    //Match case default condition
    case _ => "Sorry !, The course " + course + " is not available at
Acadgild."
  }

  //Main Method
  def main(args : Array[String]):Unit =
  {
    println("****************************************")
    println()
    println(" ACADGILD COURSES ")
    println()
    println("****************************************")
    println()
    println("Following courses are available right now:\n")
    println("1. Android")
    println("2. Big Data Development")
    println("3. Big Data Development")
    println("4. Spark")
    println("****************************************")

    //User input for course name
    println("Enter your choice of course: (Example : Android)")
    var choice = scala.io.StdIn.readLine().toString()
```

```
    //Get price of course choosed by user
    println("\n" + printCourseDetails(choice))

  }

}
```

Output: