5. Problem Statement

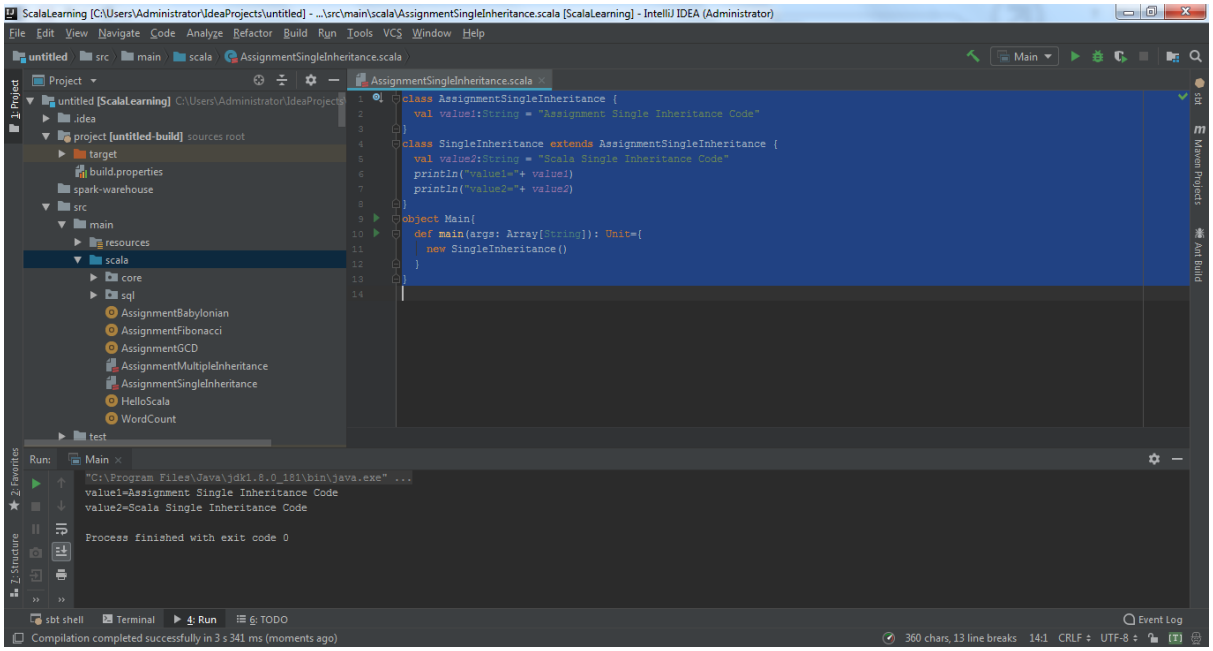
Task 1

Write a simple program to show inheritance in scala.

Scala Code-:

```
class AssignmentSingleInheritance {
  val value1:String = "Assignment Single Inheritance Code"
}
class SingleInheritance extends AssignmentSingleInheritance {
  val value2:String = "Scala Single Inheritance Code"
  println("value1="+ value1)
  println("value2="+ value2)
}
object Main{
  def main(args: Array[String]): Unit={
    new SingleInheritance()
  }
}
```

Scala Output-:



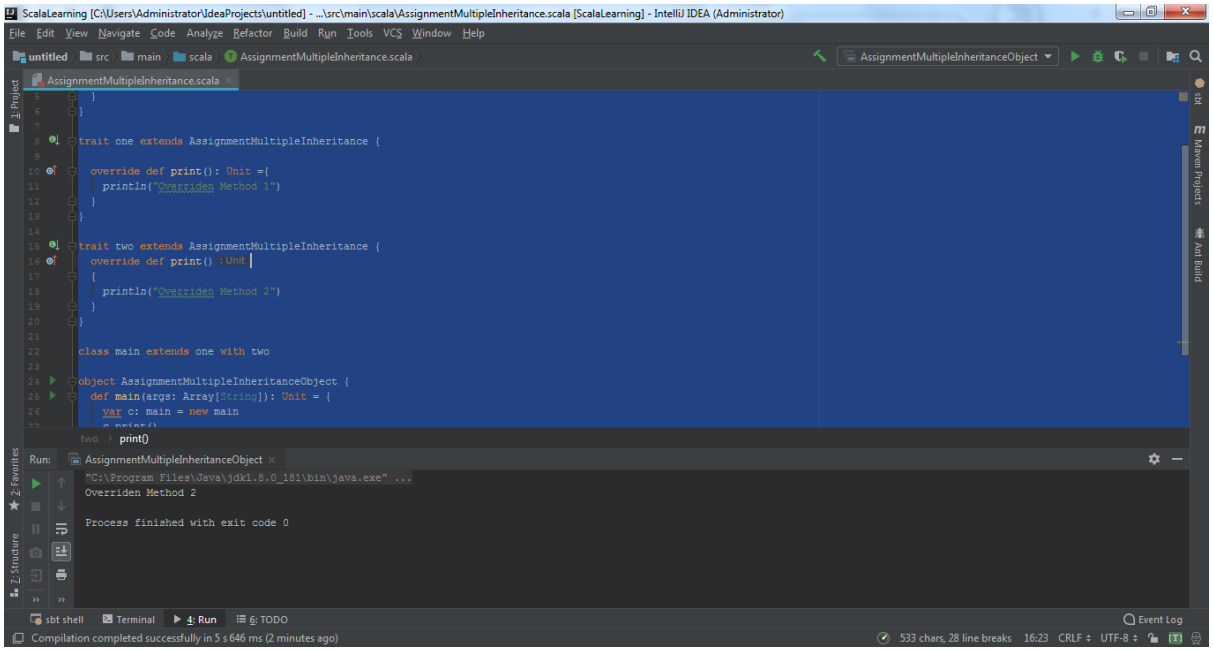
Task 2

Write a simple program to show multiple inheritance in scala

Scala Code-:

```
 trait AssignmentMultipleInheritance {

  def print(): Unit ={
    println("Acadgild Multiple Inheritance Assignment")
  }
}

trait one extends AssignmentMultipleInheritance {

  override def print(): Unit ={
    println("Overriden Method 1")
  }
}

trait two extends AssignmentMultipleInheritance {
  override def print()
  {
    println("Overriden Method 2")
  }
}

class main extends one with two

object AssignmentMultipleInheritanceObject {
  def main(args: Array[String]): Unit = {
    var c: main = new main
    c.print()
  }
}
```

Scala Output-:



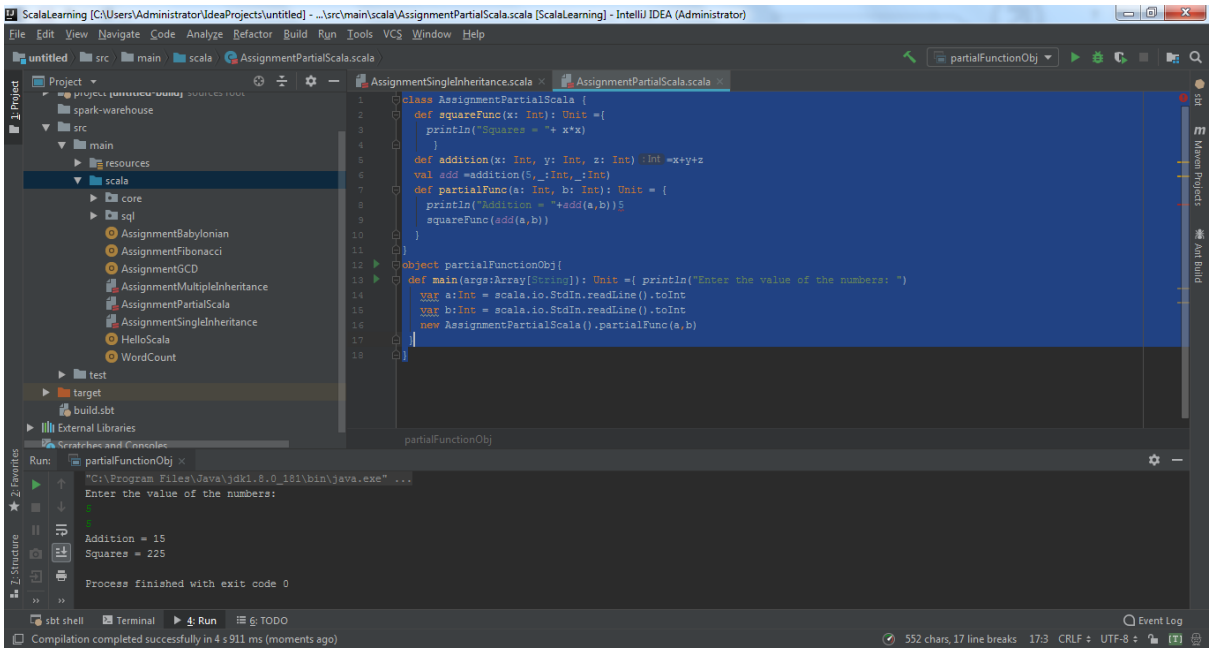
Task 3

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.

Scala Code-:

```
class AssignmentPartialScala {
  def squareFunc(x: Int): Unit ={
    println("Squares = "+ x*x)
     }
  def addition(x: Int, y: Int, z: Int)=x+y+z
  val add =addition(5,_:Int,_:Int)
  def partialFunc(a: Int, b: Int): Unit = {
    println("Addition = "+add(a,b))5
    squareFunc(add(a,b))
  }
}
object partialFunctionObj{
 def main(args:Array[String]): Unit ={ println("Enter the value of the numbers: ")
   var a:Int = scala.io.StdIn.readLine().toInt
   var b:Int = scala.io.StdIn.readLine().toInt
   new AssignmentPartialScala().partialFunc(a,b)
 }
}
```

Scala Output-:



Task 4

Write a program to print the prices of 4 courses of Acadgild:

Android App Development -14,999 INR

Data Science - 49,999 INR

Big Data Hadoop & Spark Developer – 24,999 INR

Blockchain Certification – 49,999 INR

using match and add a default condition if the user enters any other course.

Scala Code-:

```
object AssignmentScalaCourses {
  def result(x: String):String = x match {
    case "Android App Development" => ("Android App Development  course price is
14,999/-")
    case "Data Science" => ("Data Science price is 49,999/-")
    case "Big Data Hadoop & Spark Developer" => ("Big Data Hadoop & Spark Developer
price is 24,999/-")
    case "Blockchain Certification" => ("Blockchain Certification prices is
49,999/-")
    case _=> ("This course is not available") }
  def main(args: Array[String]): Unit = {
    print(result("Blockchain Certification"))
  }
}
```

Scala Output-: