# Assignment 17

## Task1

**Write a simple program to show inheritance in scala**

```
class Employee{
   var salary:Float = 10000
}

class Programmer extends Employee{        //Programmer inherits the
                                          properties of Employee
   var bonus:Int = 5000
   println("Salary = "+salary)
   println("Bonus = "+bonus)
}

object Employee{
   def main(args:Array[String]){
      new Programmer()
   }
}
```

## Task2

**Write a simple program to show multiple inheritance in scala**

```
class Emp{
   var salary_1 = 10000
}

class Analyst extends Emp{              //Analyst inherits the properties of Emp
   var salary_2 = 20000
}

class Manager extends Analyst{          //Manager inherits the properties of
Analyst
   def show(){
     println("Salary of the manager =" + (salary_1+salary_2))
   }
```

```
}

object Employee_2{
   def main(args:Array[String]){
      var m = new Manager()
      m.show()
   }
}
```

**Task3**

**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.**

```
object Add{

  val add: PartialFunction[(Int,Int),Int] = {      //declaring a partial function
    case (a,b)=>7+a+b;                             //3 variables with 7 as the
constant number
}
def sq(x:Int):Unit = {                             //defining another method with
one argument
   println ("Square is "+ x*x)                     //squaring the result
}

 def main(args: Array[String]) = {
   val res= sq({add(2,3)})                         //passing the partial function as an
input to the method 'sq' and storing it in variable 'res'
  }

}
```

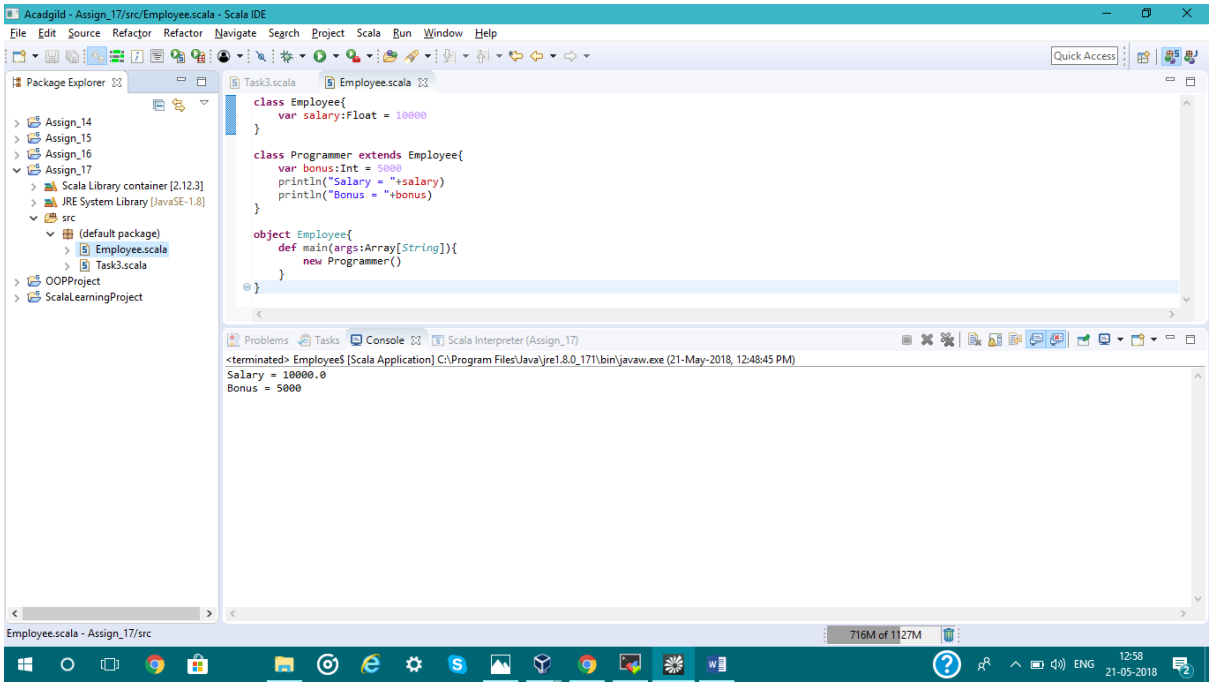
**Task4**

**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.**

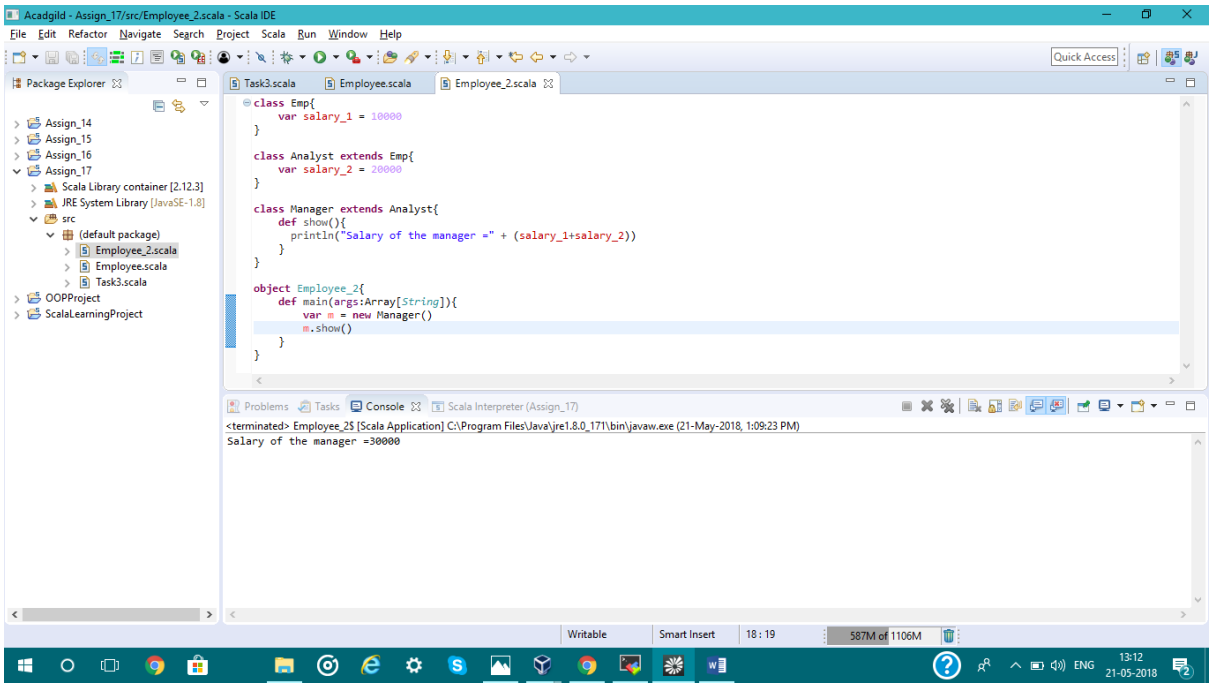
```
import java.util.Scanner;
object Task3 {
  def Acadgild(Course : String): Unit =
    Course match                                    //match case
    {
    case "Android App Development" => println("Fees is 14999");
    case "Data Science" => println("Fees is 49999");
    case "Big Data Hadoop & Spark Developer" =>println("Fees is 24999");
    case "Blockchain Certification" =>println("Fees is 49999");
    case _ => println("No such course available");

  }
 def main(args: Array[String]) {
   println("Enter the course ")
   val scanner = new java.util.Scanner(System.in)  //for taking input from the
user
   val course = scanner.nextLine();
 val fees = Acadgild(course)
 }
}
```

# Screenshots

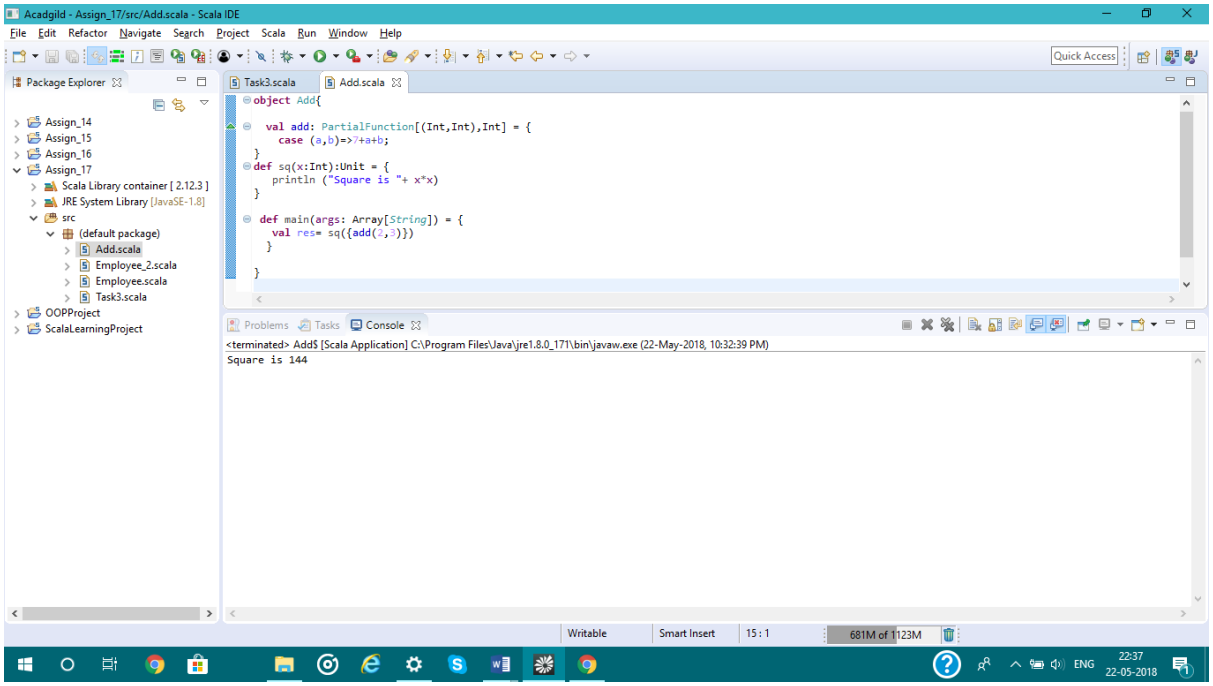
## Task1



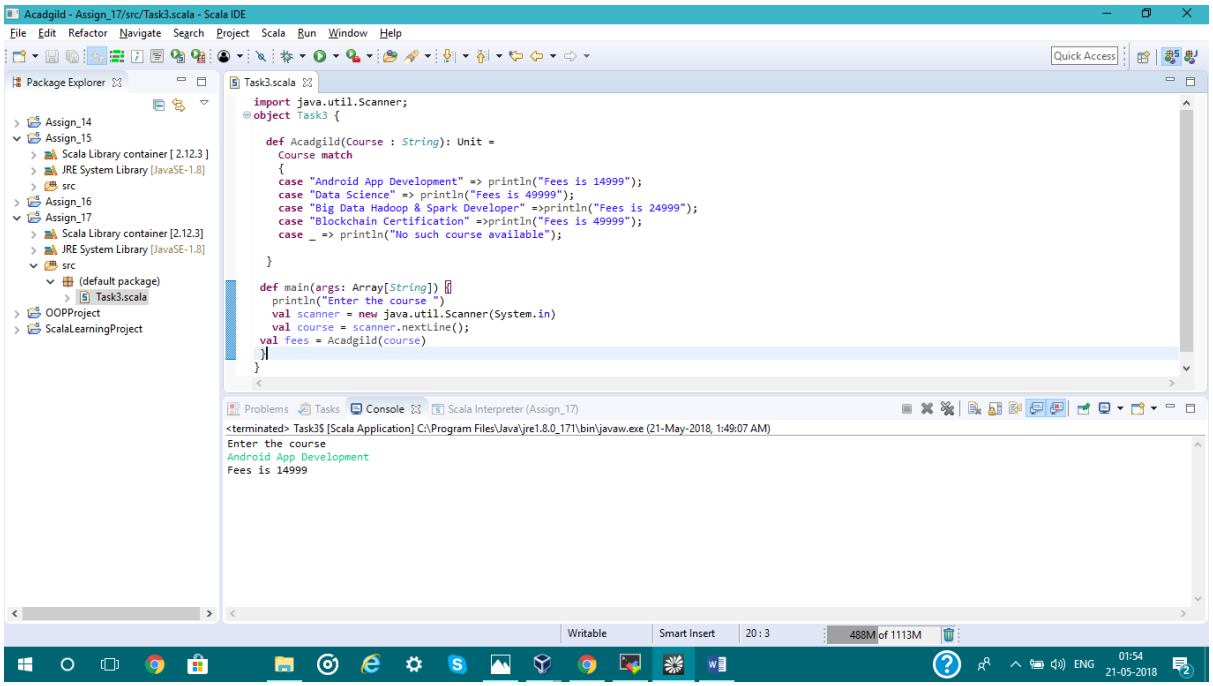

## Task2



# Task3


Acadgild - Assign_17/src/Add.scala - Scala IDE
File Edit Refactor Navigate Search Project Scala Run Window Help
Package Explorer
Assign_14
Assign_15
Assign_16
Assign_17
Scala Library container [ 2.12.3 ]
JRE System Library [JavaSE-1.8]
src
(default package)
Add.scala
Employee_2.scala
Employee.scala
Task3.scala
OOPProject
ScalaLearningProject
Task3.scala
Add.scala
object Add{
val add: PartialFunction[(Int,Int),Int] = {
case (a,b)=>7+a+b;
}
def sq(x:Int):Unit = {
println ("Square is "+ x*x)
}
def main(args: Array[String]) = {
val res= sq({add(2,3)})
}
}
Problems Tasks Console
<terminated> Add$ [Scala Application] C:\Program Files\Java\jre1.8.0_171\bin\javaw.exe (22-May-2018, 10:32:39 PM)
Square is 144
Writable Smart Insert 15 : 1 681M of 1123M
ENG 22:37 22-05-2018

# Task4


Acadgild - Assign_17/src/Task3.scala - Scala IDE
File Edit Refactor Navigate Search Project Scala Run Window Help
Package Explorer
Assign_14
Assign_15
Scala Library container [ 2.12.3 ]
JRE System Library [JavaSE-1.8]
src
Assign_16
Assign_17
Scala Library container [2.12.3]
JRE System Library [JavaSE-1.8]
src
(default package)
Task3.scala
OOPProject
ScalaLearningProject
Task3.scala
import java.util.Scanner;
object Task3 {
def Acadgild(Course : String): Unit =
Course match
{
case "Android App Development" => println("Fees is 14999");
case "Data Science" => println("Fees is 49999");
case "Big Data Hadoop & Spark Developer" =>println("Fees is 24999");
case "Blockchain Certification" =>println("Fees is 49999");
case _ => println("No such course available");
}
def main(args: Array[String]) {
println("Enter the course ")
val scanner = new java.util.Scanner(System.in)
val course = scanner.nextLine();
val fees = Acadgild(course)
}
}
Problems Tasks Console Scala Interpreter (Assign_17)
<terminated> Task3$ [Scala Application] C:\Program Files\Java\jre1.8.0_171\bin\javaw.exe (21-May-2018, 1:49:07 AM)
Enter the course
Android App Development
Fees is 14999
Writable Smart Insert 20 : 3 488M of 1113M
ENG 01:54 21-05-2018