Scala4 Assignment

Task 1

Below code show inheritance and multiple inhertance.

Class Dog is subclass show inheritance, and eatthesleep is another subclass which extends foyrleggedanimal shows muliple inheritance .

```scala
class fourleggedanimal {              //Super class
    def walk {println("I am walking")}
    def run  {println("I am running")}
    def eat  {println("I am eating")}
    def sleep  {println("I am slepping")}
}

class dog extends fourleggedanimal {      //Sub class

    def walkThenRun{

        super.walk
        super.run
    }
    override def walk {println("I am walking from subclass")} //Over ride
}

class eatThensleep extends fourleggedanimal{

    def eatthensleep{
        super.eat
        super.sleep
    }
}

object driverClass{
    def main(args: Array[String]) : Unit ={    //Main class
    val a = new dog
    a.walkThenRun
    a.walk
    a.eat
    a.sleep
    }
}
```
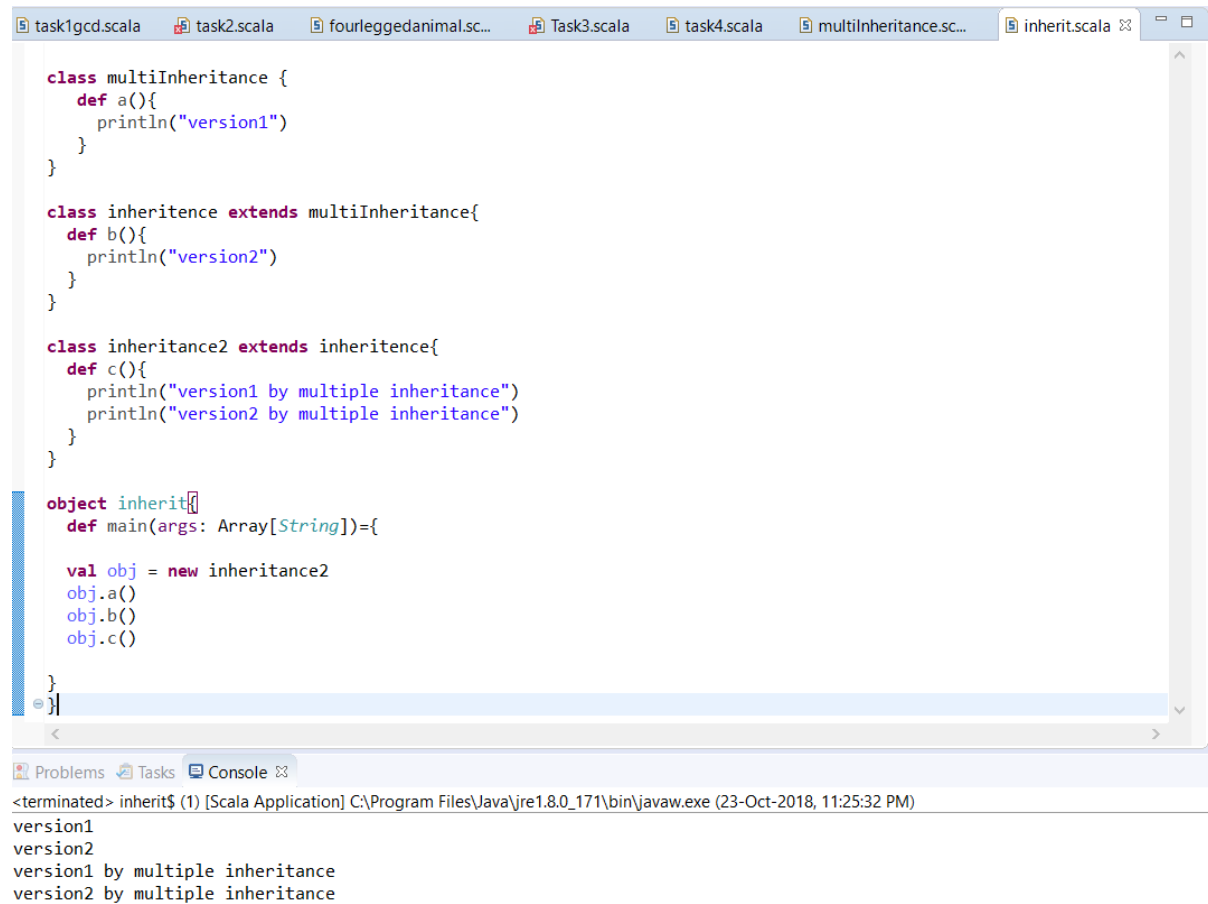
Output

```
I am walking
I am running
I am walking from subclass
I am eating
I am slepping
```

Task 2

In below screen shot we performed multiple inheritance, class inheritance extends

MultiInheritance and inheritance2 extends to inheritance.

```scala
class multiInheritance {
  def a(){
    println("version1")
  }
}

class inheritence extends multiInheritance{
  def b(){
    println("version2")
  }
}

class inheritance2 extends inheritence{
  def c(){
    println("version1 by multiple inheritance")
    println("version2 by multiple inheritance")
  }
}

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

    val obj = new inheritance2
    obj.a()
    obj.b()
    obj.c()

  }
}
```
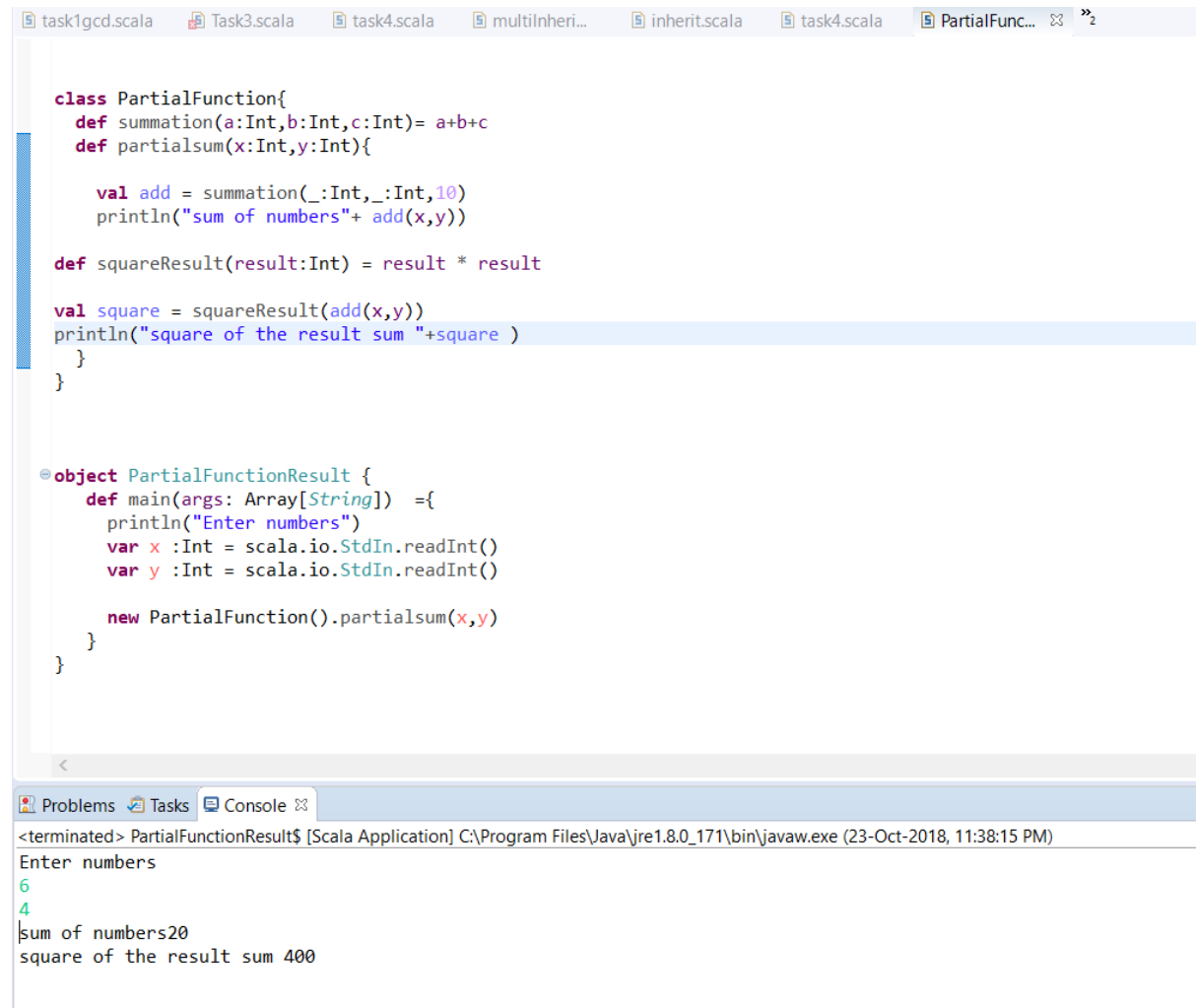
Problems | Tasks | Console ⊠

<terminated> inherit$ (1) [Scala Application] C:\Program Files\Java\jre1.8.0_171\bin\javaw.exe (23-Oct-2018, 11:25:32 PM)

```
version1
version2
version1 by multiple inheritance
version2 by multiple inheritance
```

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
class PartialFunction{
  def summation(a:Int,b:Int,c:Int)= a+b+c
  def partialsum(x:Int,y:Int){

    val add = summation(_:Int,_:Int,10)
    println("sum of numbers"+ add(x,y))

  def squareResult(result:Int) = result * result

  val square = squareResult(add(x,y))
  println("square of the result sum "+square )
   }
 }


object PartialFunctionResult {
    def main(args: Array[String])  ={
      println("Enter numbers")
      var x :Int = scala.io.StdIn.readInt()
      var y :Int = scala.io.StdIn.readInt()

      new PartialFunction().partialsum(x,y)
    }
 }
```
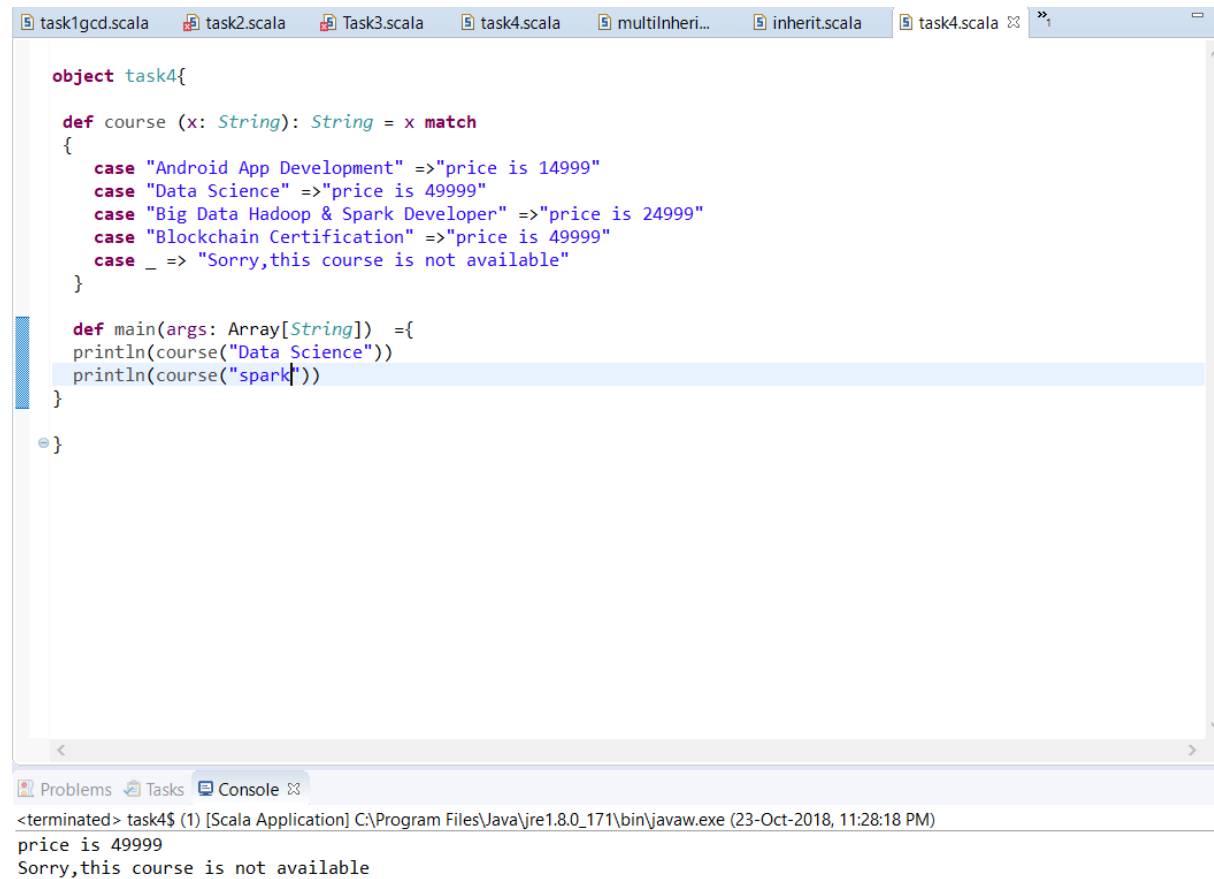
Problems   Tasks   Console ✕

<terminated> PartialFunctionResult$ [Scala Application] C:\Program Files\Java\jre1.8.0_171\bin\javaw.exe (23-Oct-2018, 11:38:15 PM)

```
Enter numbers
6
4
sum of numbers20
square of the result sum 400
```

Task 4,

Below are the results for Task 4

Match case

```scala
object task4{

  def course (x: String): String = x match
  {
      case "Android App Development" =>"price is 14999"
      case "Data Science" =>"price is 49999"
      case "Big Data Hadoop & Spark Developer" =>"price is 24999"
      case "Blockchain Certification" =>"price is 49999"
      case _ => "Sorry,this course is not available"
  }

  def main(args: Array[String])  ={
  println(course("Data Science"))
  println(course("spark"))
  }

}
```

Problems Tasks Console

<terminated> task4$ (1) [Scala Application] C:\Program Files\Java\jre1.8.0_171\bin\javaw.exe (23-Oct-2018, 11:28:18 PM)
```
price is 49999
Sorry,this course is not available
```