Problem Statement

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.

Solution-

We have defined below class **PartialFunc** which contains partial function which takes 2 integers from user and 1 constant as input and adds the result.

We have 1 more method in same class named as square which takes the above function and squares the result-

```
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   Project
                                                      PartialFunc.scala ×
                                                                           PartialApply.scala ×
     Assignment-15.2 [assignment-15-2] C:\Users\rakes\ld
                                                             class PartialFunc {
                                                               val addConstantTo: PartialFunction[(Int, Int), Int] = {
      project [assignment-15-2-build] sources root
                                                      4
                                                                  case(a,b) => a+b+10
      ∨ III src

♣ 2: Structure

                                                      5
         main
                                                      6
           scala
                                                      7
                                                                def square(addConstantTo:Int) = addConstantTo * addConstantTo
                  PartialApply
                  PartialFunc
```

Now in the main method we are calling same function. We are passing 10, 20 as input and constant 10 is being added.

```
PartialFunc.scala ×
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    PartialApply.scala ×

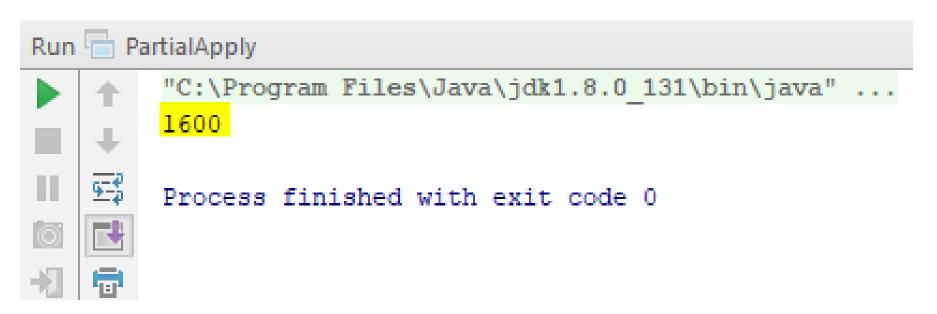
    Assignment-15.2 [assignment-15-2] C:\Users\rakes\ld

                                                           object PartialApply {
                                                             def main(args: Array[String]): Unit = {
  > e project [assignment-15-2-build] sources root

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                                                                val x = new PartialFunc
      main
                                                               println(x.square(x.addConstantTo((10,20))))
         scala
                                                    7
               PartialApply
                                                    8
               PartialFunc
```

Below is the output-



Problem Statement

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.

Solution-

We have defined a class which contains a method for pattern matching which will take string as input which will be course name in our case and will give its price(Int) as output-

```
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    Project
                                                                                                                                                                                                                                                                                          🚰 MatchTest.scala 🗵

    TestMatch.scala

    Assignment-15.2 [assignment-15-2] C:\Users\rakes\ld

                                                                                                                                                                                                                                                                                                                           class MatchTest {
                                                                                                                                                                                                                                                                                           3
                                                                                                                                                                                                                                                                                                                                              def matchCourse(x: String): Int = x match{
               project [assignment-15-2-build] sources root
               ∨ src
                                                                                                                                                                                                                                                                                                                                                            case "Android" => 12999
                                                                                                                                                                                                                                                                                           5
                                main
                                                                                                                                                                                                                                                                                                                                                            case "Big Data Development 1" => 17999
                                                                                                                                                                                                                                                                                           6
                                                 scala
                                                                                                                                                                                                                                                                                                                                                            case "Big Data Development 2" => 17999
                                                                                                                                                                                                                                                                                           7
                                  ∨ lill test
                                                                                                                                                                                                                                                                                                                                                            case "Spark" => 19999
                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                            case => 5000
                                                                                                                                                                                                                                                                                           9
                                                 scala
                                                                                                                                                                                                                                                                                      10
                                                                                    MatchTest
                                                                                                                                                                                                                                                                                      11

    TestMatch

                                                                                                                                                                                                                                                                                     12
```

Below is the main method in which we are calling this method using course name and its corresponding price is getting generated-

```
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   Project
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                                                                                                                                                                                                                                                                                                                                                   TestMatch.scala ×

    Assignment-15.2 [assignment-15-2] C:\Users\rakes\ld

                                                                                                                                                                                                                                                                          object TestMatch {
                                                                                                                                                                                                                                                                                               def main(args: Array[String]): Unit = {
             > = project [assignment-15-2-build] sources root
             ∨ III src
                                                                                                                                                                                                                                                                                                         val x = new MatchTest
                            main
                                                                                                                                                                                                                                                                                                         println(x.matchCourse("Android"))
                                                                                                                                                                                                                                                   6
                                         > scala
                                                                                                                                                                                                                                                                                                         println(x.matchCourse("Big Data Development 1"))

✓ Image: Vest of the state of the state
                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                         println(x.matchCourse("Big Data Development 2"))
                                         scala
                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                         println(x.matchCourse("Spark"))
                                                                                                                                                                                                                                                                                                         println(x.matchCourse("Any other course"))
                                                                                                                                                                                                                                               10
                                                                       MatchTest
                                                                                                                                                                                                                                               11

    TestMatch

                                                                                                                                                                                                                                              12
```

Below is the output (course price) for the same-

