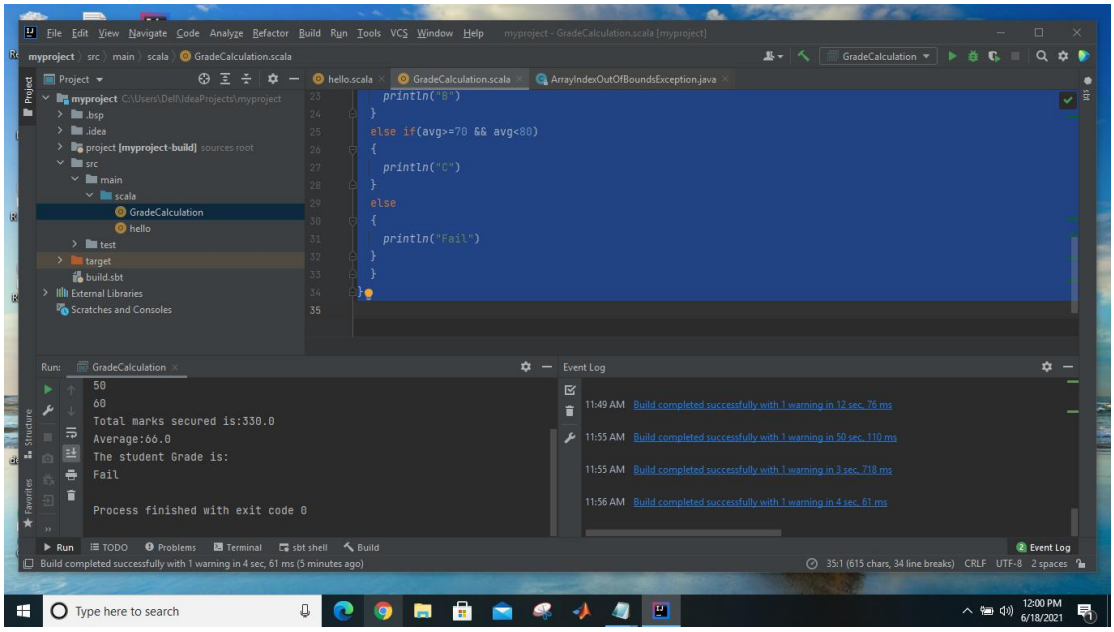
1. WAP to calculate student grade based on below rules
    a. 90 to 100 -> Grade A
    b. 80 to 90 -> Grade B
    c. 70 to 80 -> Grade C
    d. Failure.

```
private object GradeCalculation {
  def main(args: Array[String])
  {
    val marks: Array[Int] = Array(80,80,60,50,60)
    var total:Float=0
    var avg:Float=0

    for(i <- marks )
    {
      println(i)
    }
    for(i <-marks.indices) {
      total = total + marks(i)
    }
      println("Total marks secured is:" + total)
      avg = total/5
      println ("Average:" + avg)
      println("The student Grade is: ")
        if(avg>=90)
          println("A")
    else if(avg>=80 && avg<90)
  {
    println("B")
  }
  else if(avg>=70 && avg<80)
  {
    println("C")
  }
  else
  {
    println("Fail")
  }
  }
}
```

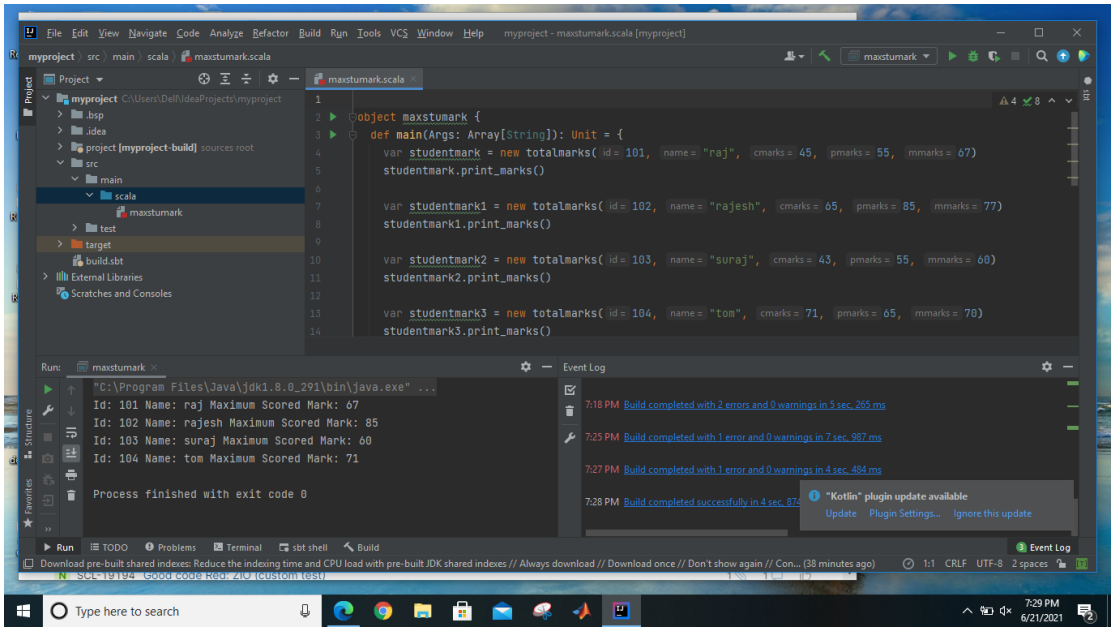



2. WAP to calculate maximum % scored student report from below data.

{id:101,name:raj,cmarks:45,pmarks:55,mmarks:67}
{id:102,name:rajesh,cmarks:65,pmarks:85,mmarks:77}
{id:103,name:suraj,cmarks:43,pmarks:55,mmarks:60}
{id:104,name:tom,cmarks:71,pmarks:65,mmarks:70}

```
object maxstumark {
  def main(Args: Array[String]): Unit = {
    var studentmark = new totalmarks(101, "raj", 45, 55, 67)
    studentmark.printmarks()

    var studentmark1 = new totalmarks(102, "rajesh", 65, 85, 77)
    studentmark1.printmarks()

    var studentmark2 = new totalmarks(103, "suraj", 43, 55, 60)
    studentmark2.printmarks()

    var studentmark3 = new totalmarks(104, "tom", 71, 65, 70)
    studentmark3.printmarks()
  }
}
  class totalmarks(id: Int, name: String, cmarks: Int, pmarks: Int, mmarks:
Int) {
    def printmarks(): Unit = {

      if (cmarks > pmarks)
      {
```

```
        if (cmarks > mmarks)
          println("Id: " + this.id + " Name: " + this.name + " Maximum
Scored Mark: " + cmarks)
        else
          println("Id: " + this.id + " Name: " + this.name + " Maximum
Scored Mark: " + mmarks)
      }
      else {
        if(pmarks > mmarks)
          println("Id: " + this.id + " Name: " + this.name + " Maximum
Scored Mark: " + pmarks)
        else
          println("Id: " + this.id + " Name: " + this.name + " Maximum
Scored Mark: " + mmarks)
      }
          }
  }
```




3. WAP to perform sorting of below data based on id and name(create class, object and a method for sorting in util class)

{id:101,name:raj}
{id:121,name:rajesh}
{id:130,name:suraj}
{id:114,name:tom}

```
def data(x: Int, y: String)
{
  var id: Int =x
  var name: String =y
}
object emp1
{
  def main(args: Array[String])
{
    val firstEmp: Unit = data("raj", 101)
    val secondEmp: Unit = data(121, "rajesh")
    val thirdEmp: Unit = data(130, "suraj")
    val forthEmp: Unit = data(114, "tom")
    val empList = List(firstEmp, secondEmp, thirdEmp, forthEmp)
    empList.sortBy(empList => (empList.id, empList.name))
  }
```