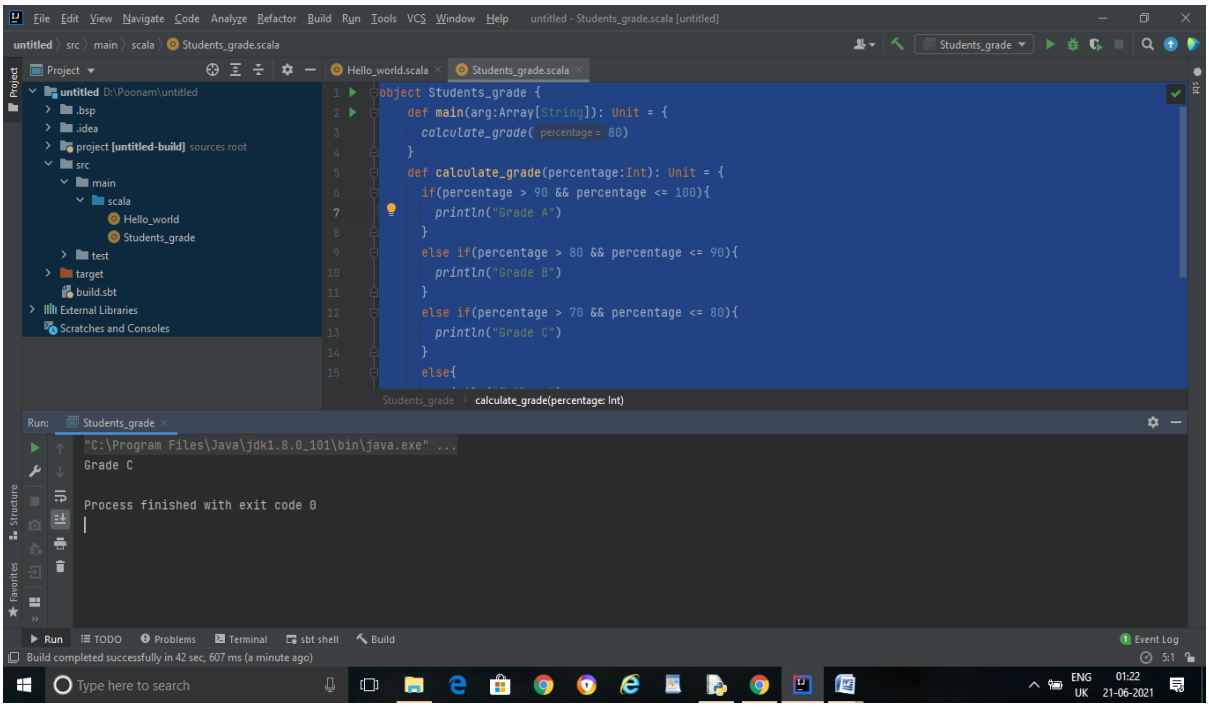
1. Write a program to calculate student grade based on below rules:

A. 90 to 100 -> Grade A
B. 80 to 90 -> Grade B
C. 70 to 80 -> Grade C
D. Failure.

Code:

```
object Students_grade {
   def main(arg:Array[String]): Unit = {
    calculate_grade(80)
   }
   def calculate_grade(percentage:Int): Unit = {
    if(percentage > 90 && percentage <= 100){
     println("Grade A")
    }
    else if(percentage > 80 && percentage <= 90){
     println("Grade B")
    }
    else if(percentage > 70 && percentage <= 80){
     println("Grade C")
    }
    else{
     println("Failure")
    }
   }
}
```



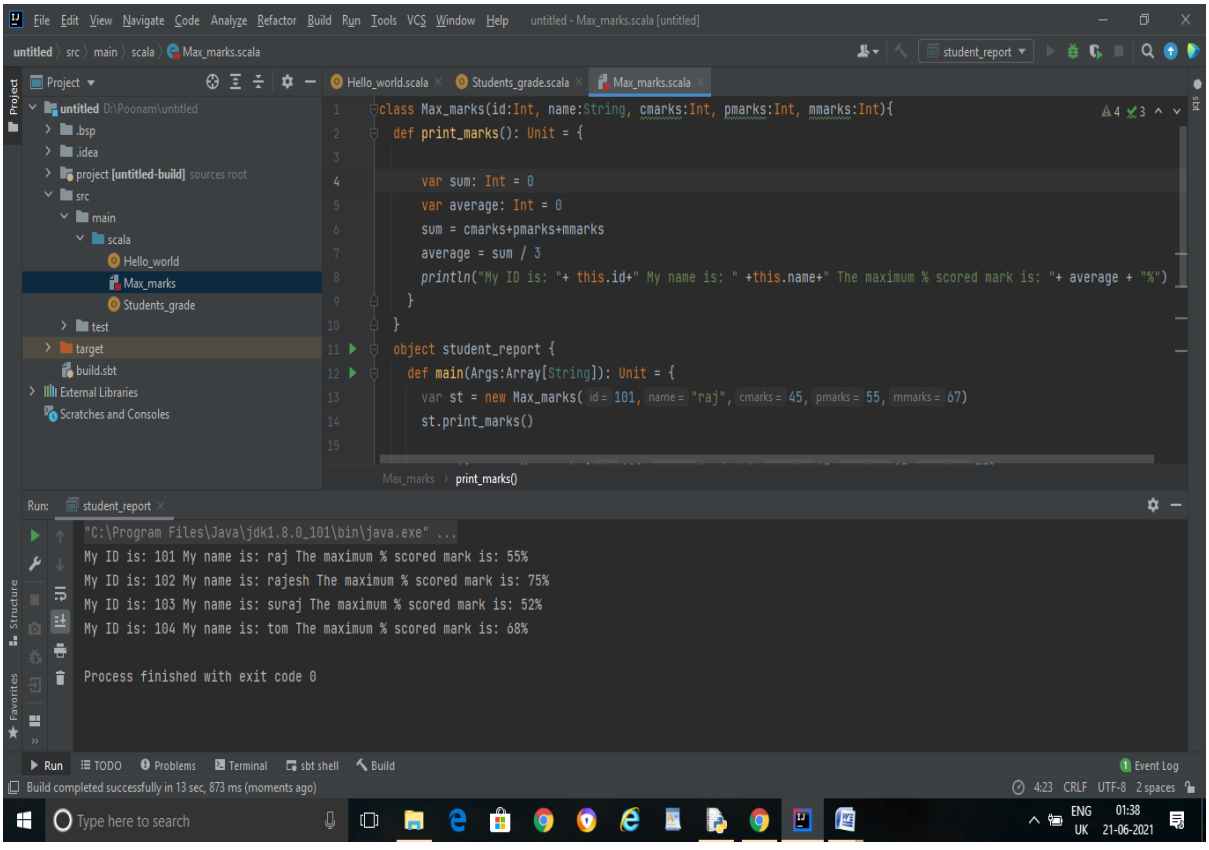
2. Write a Program to calculate maximum % scored student report from below data.

{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}

Code:

```
class Max_marks (id:Int, name:String, cmarks:Int, pmarks:Int, mmarks:Int){
  def print_marks(): Unit = {

     var sum: Int = 0
     var average: Int = 0
     sum = cmarks+pmarks+mmarks
     average = sum / 3
     println("My ID is: "+ this.id+" My name is: " +this.name+" The maximum % scored mark is: "+ average +
"%")
    }
  }
  object student_report {

    def main(Args:Array[String]): Unit = {
     var st = new maximum_marks(101,"raj",45,55,67)
     st.print_marks()

     var st1 = new maximum_marks(102,"rajesh",65,85,77)
     st1.print_marks()

     var st2 = new maximum_marks(103,"suraj",43,55,60)
     st2.print_marks()

     var st3 = new maximum_marks(104,"tom",71,65,70)
     st3.print_marks()
    }
}
```



3. Write a program 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}

Code: