OBJECT ORIENTED PROGRAMMING LABORATORY WORK

MODULE 3

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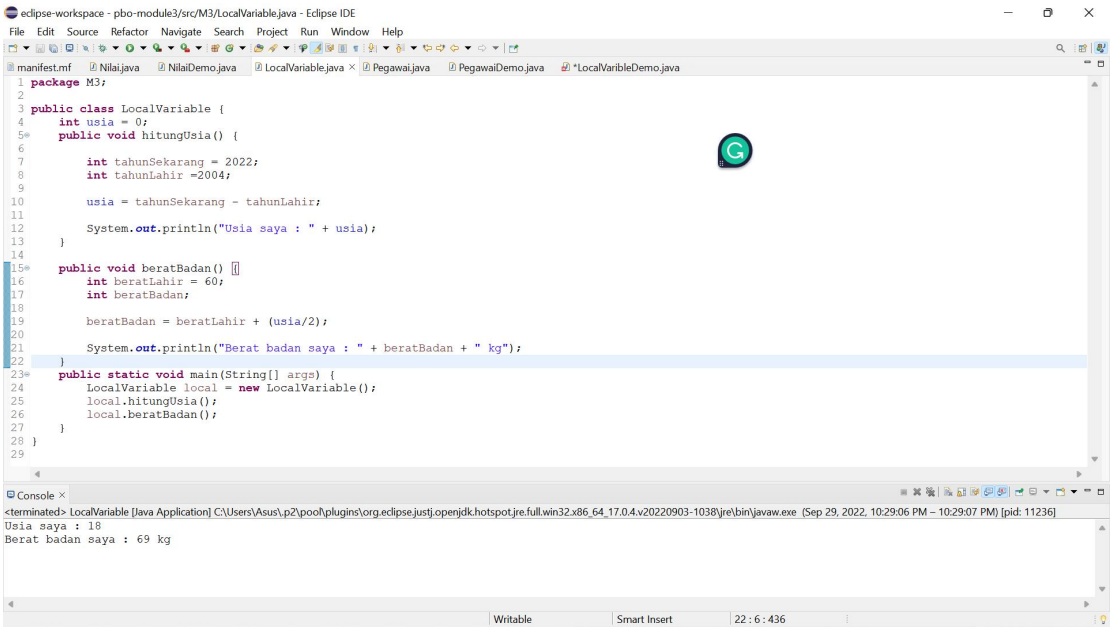
INFORMATICS STUDY PROGRAM

FACULTY OF COMMUNICATION AND INFORMATION SCIENCE

MUHAMMADIYAH SURAKARTA UNIVERSITY

Exercise 1

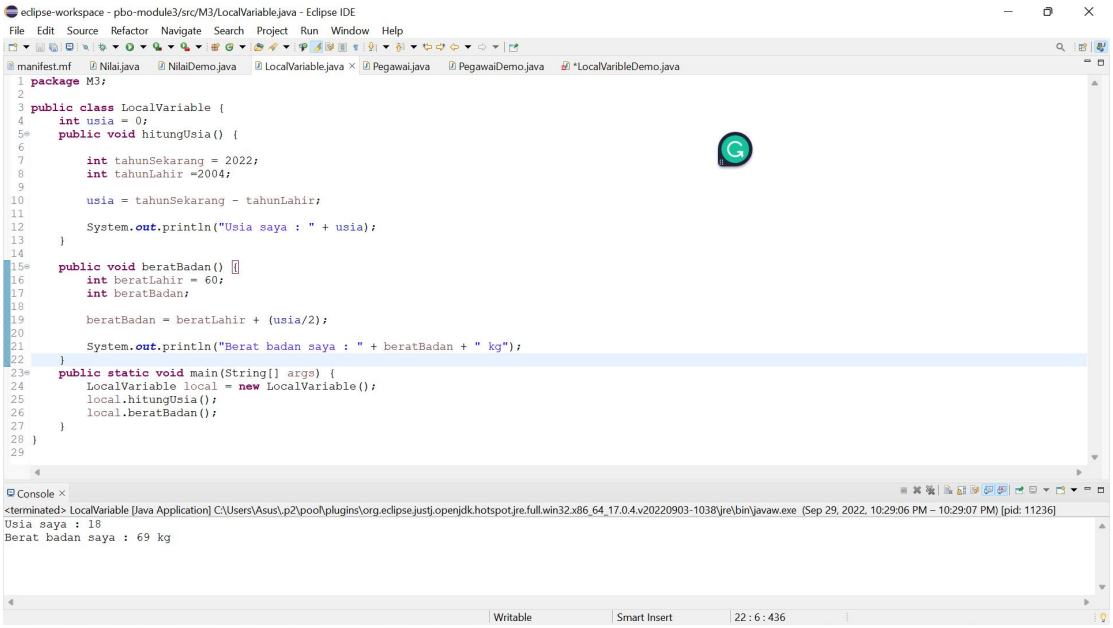
1. Create a new method to calculate body weight with the name void bodyweight(), and in that method there is a local variable Birthweight.



2. Can the value of the age variable be called from the void Bodyweight() method?You can't, because the age variable is a local variable. So, it can only be called the countAge() method.

Exercise 2

1. Modify the LocalVariable class by adding a global variable to hold the value of age.

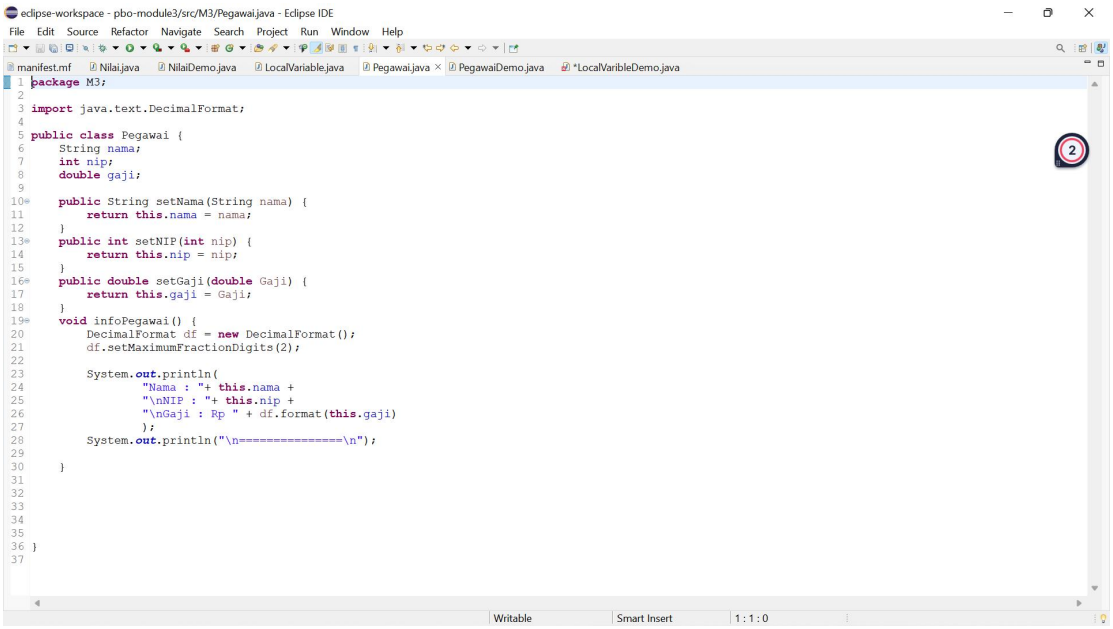


2. Analysis of results:

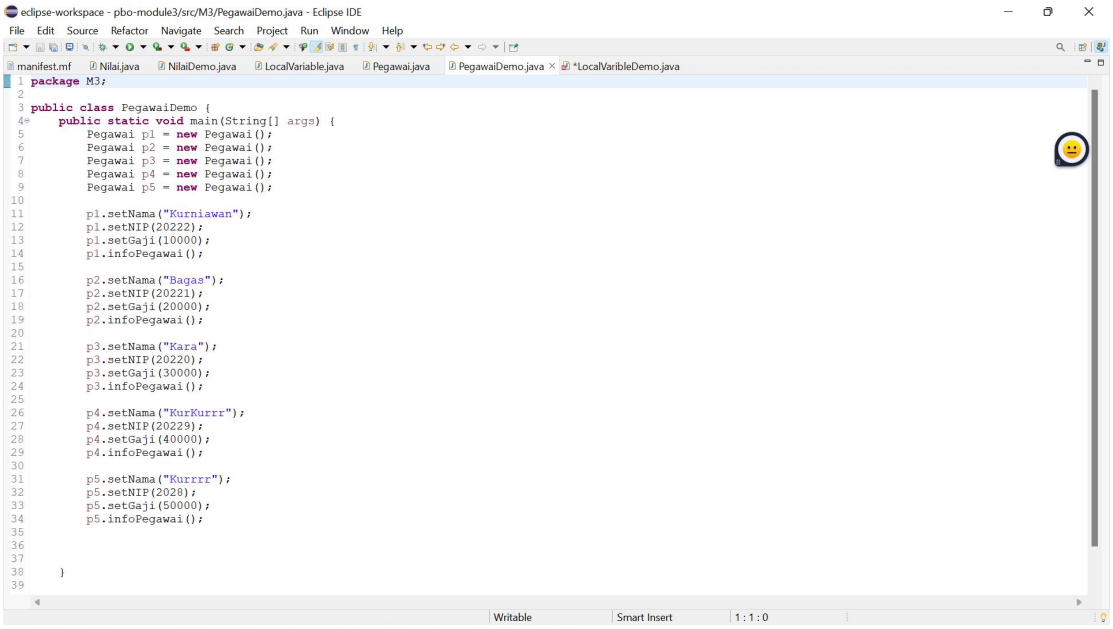
The result after executing is that now the weight method can access the age variable and can run the output, because the variable is a global variable, so it can be used in any method.

Exercise 3

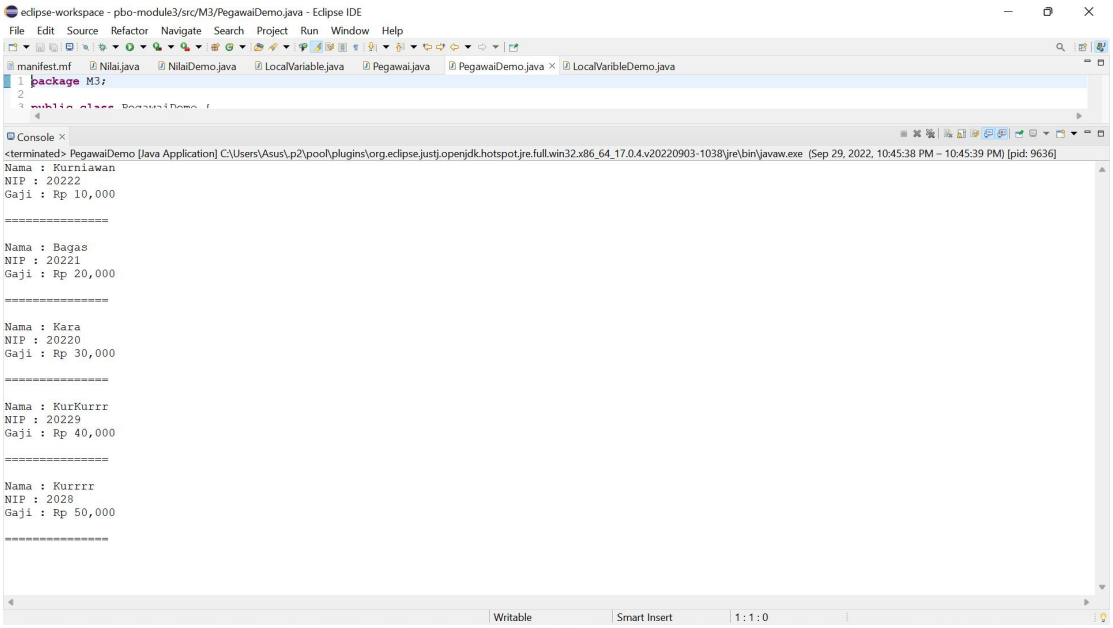
1. Completing the Program8 code by adding methods that have parameters and creating 5 employee objects with different names, nip, and salaries.



```
package M3;

import java.text.DecimalFormat;

public class Pegawai {
    String nama;
    int nip;
    double gaji;

    public String setNama(String nama) {
        return this.nama = nama;
    }
    public int setNIP(int nip) {
        return this.nip = nip;
    }
    public double setGaji(double Gaji) {
        return this.gaji = Gaji;
    }
    void infoPegawai() {
        DecimalFormat df = new DecimalFormat();
        df.setMaximumFractionDigits(2);

        System.out.println(
                "Nama : "+ this.nama +
                "\nNIP : "+ this.nip +
                "\nGaji : Rp " + df.format(this.gaji)
                );
        System.out.println("\n===============\n");

    }



}
```

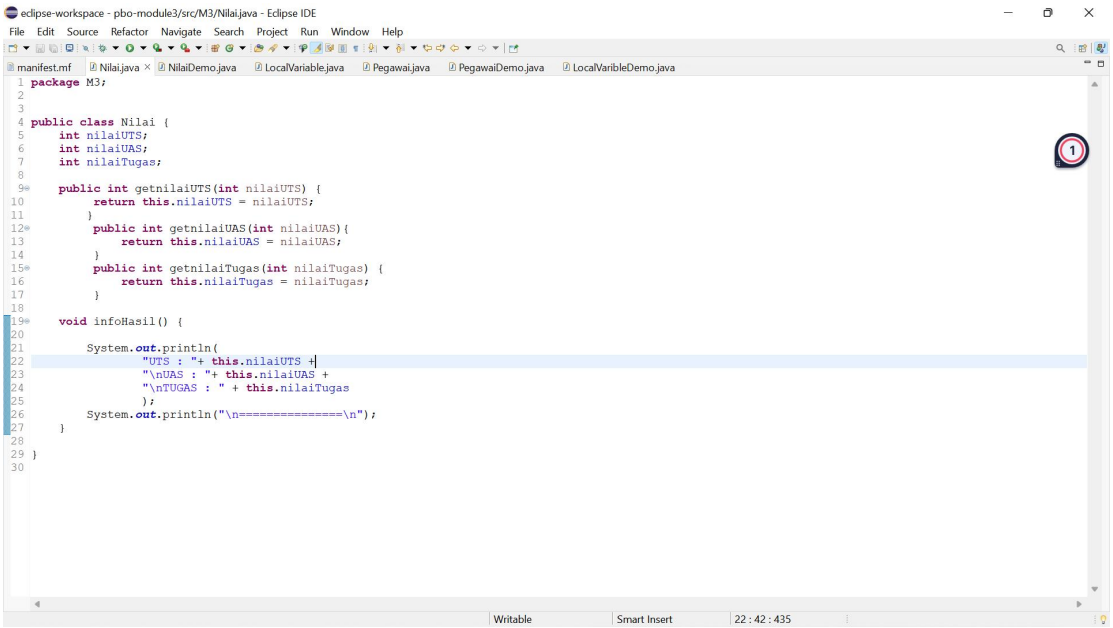


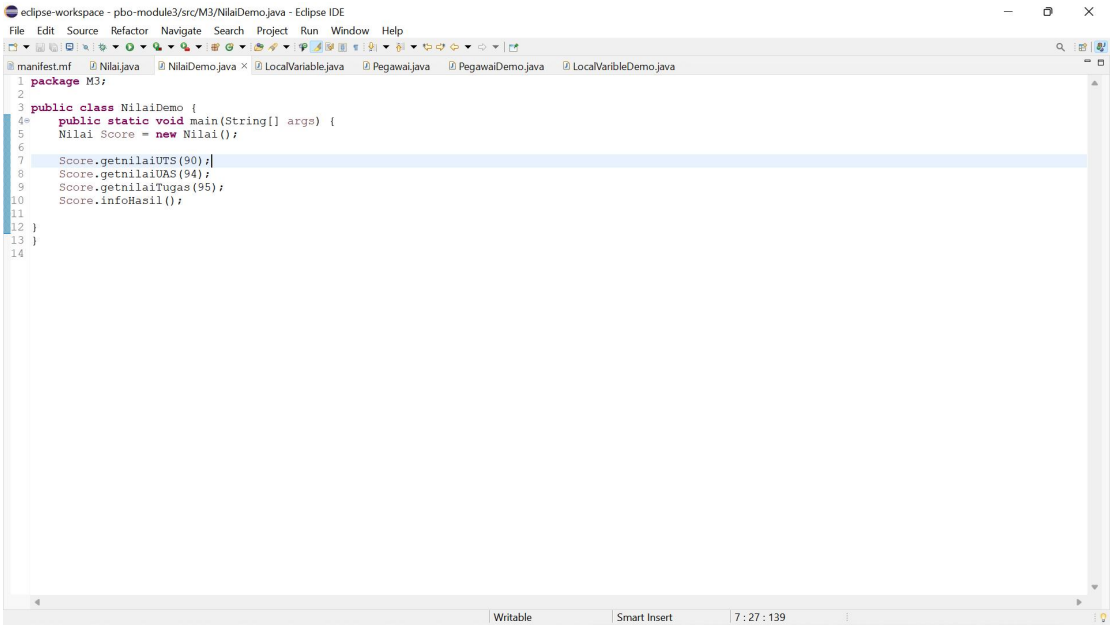
```
package M3;

public class PegawaiDemo {
    public static void main(String[] args) {
        Pegawai p1 = new Pegawai();
        Pegawai p2 = new Pegawai();
        Pegawai p3 = new Pegawai();
        Pegawai p4 = new Pegawai();
        Pegawai p5 = new Pegawai();

        p1.setNama("Kurniawan");
        p1.setNIP(20222);
        p1.setGaji(10000);
        p1.infoPegawai();

        p2.setNama("Bagas");
        p2.setNIP(20221);
        p2.setGaji(20000);
        p2.infoPegawai();

        p3.setNama("Kara");
        p3.setNIP(20220);
        p3.setGaji(30000);
        p3.infoPegawai();

        p4.setNama("KurKurrr");
        p4.setNIP(20229);
        p4.setGaji(40000);
        p4.infoPegawai();

        p5.setNama("Kurrrr");
        p5.setNIP(2028);
        p5.setGaji(50000);
        p5.infoPegawai();



    }
```

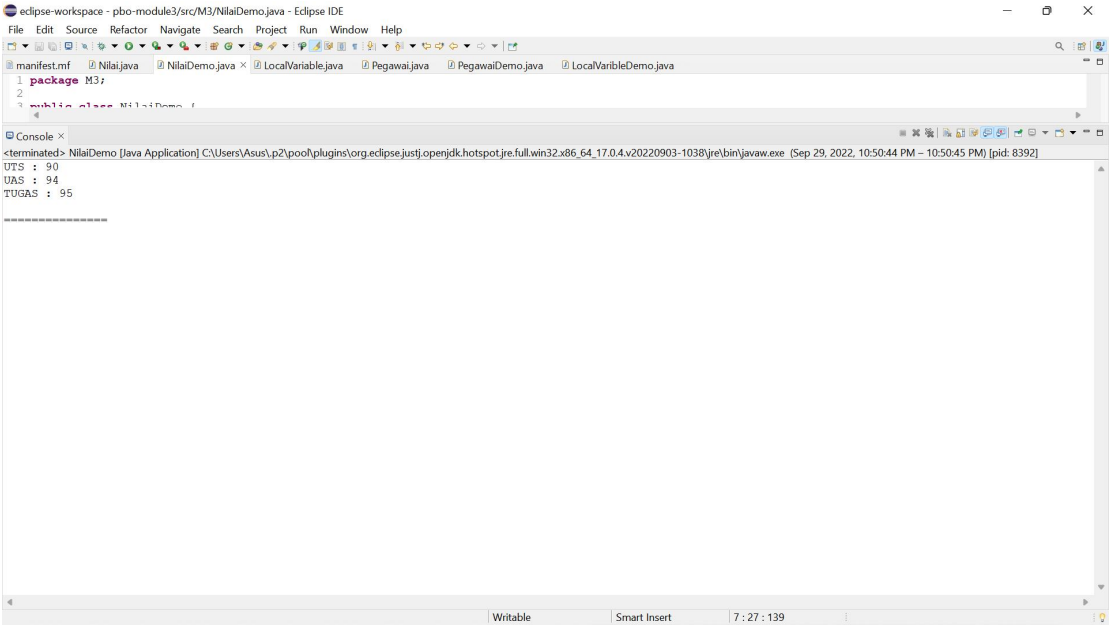


Homework

1. Completing the code in program10 by adding a void method and a return method, which returns the value of each parameter of the void method, and changes the data type from int to double and adds a double variable valueTotal.

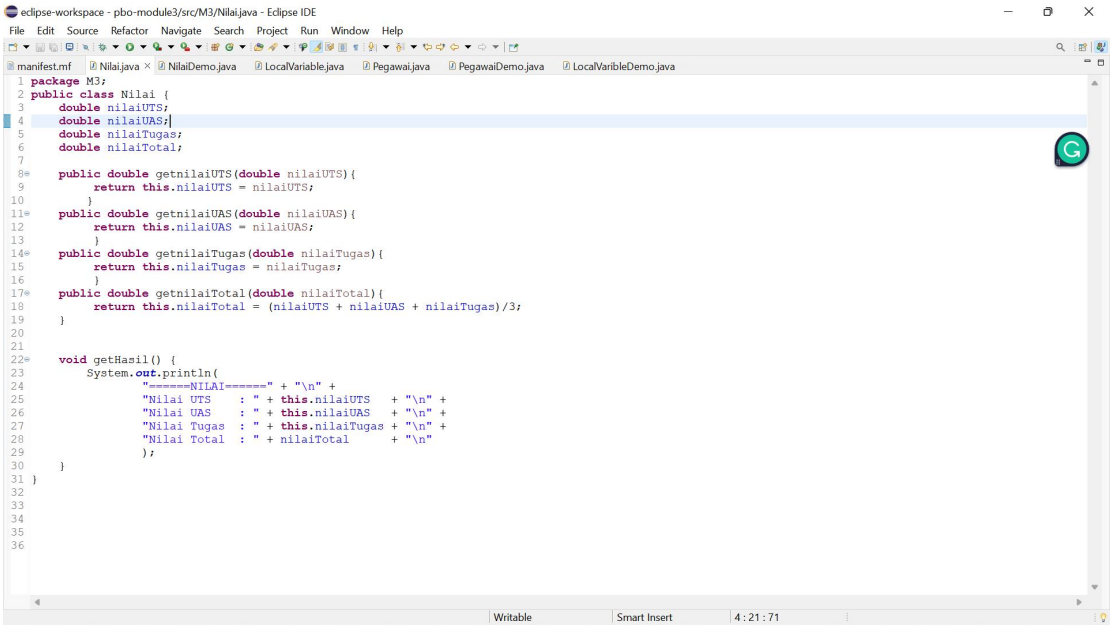


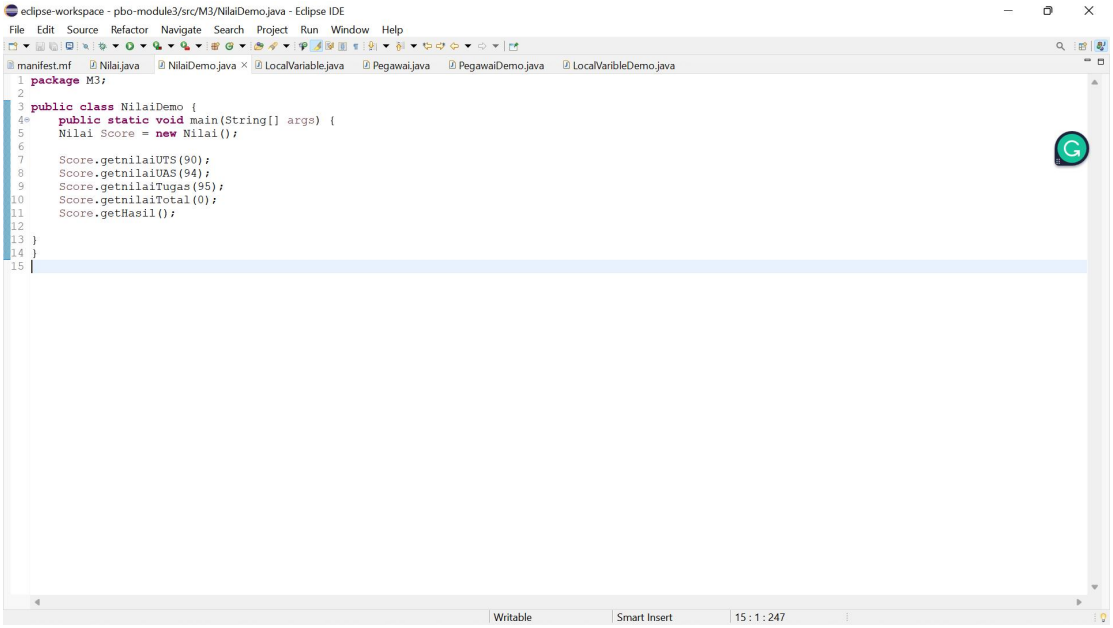


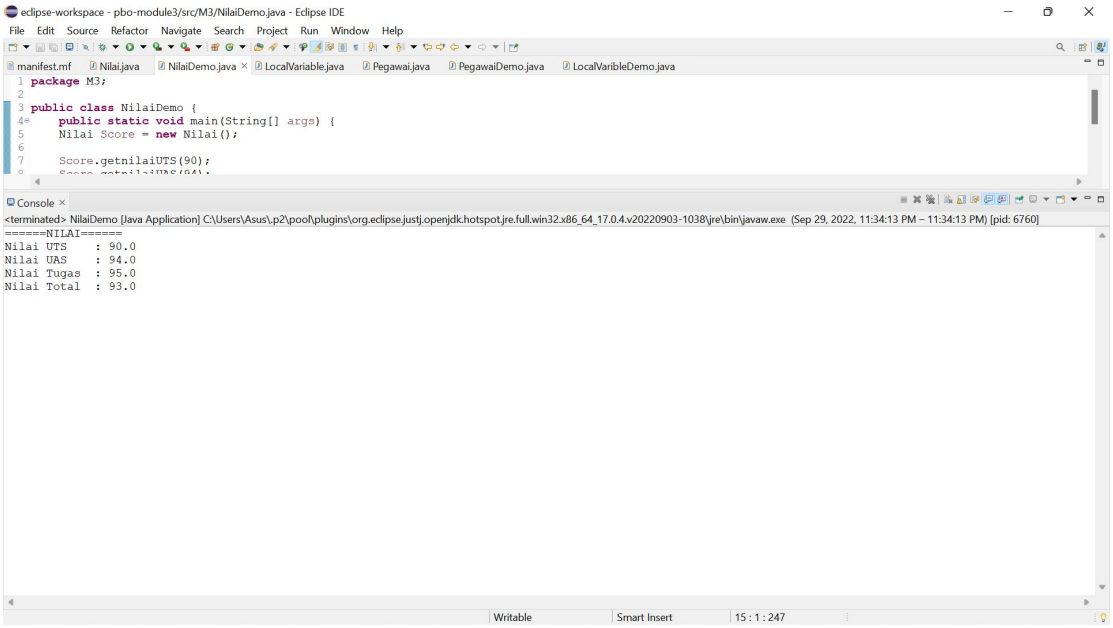


2. Change the data type from int to double and add one variable double nilaiTotal, then calculate the nilaiTotal with the following formula:

nilaiTotal = (nilaiUTS + nilaiUAS + nilaiTugas) / 3


eclipse-workspace - pbo-module3/src/M3/Nilai.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
manifest.mf
Nilai.java
NilaiDemo.java
LocalVariable.java
Pegawai.java
PegawaiDemo.java
LocalVaribleDemo.java
package M3;
public class Nilai {
double nilaiUTS;
double nilaiUAS;
double nilaiTugas;
double nilaiTotal;
public double getnilaiUTS(double nilaiUTS){
return this.nilaiUTS = nilaiUTS;
}
public double getnilaiUAS(double nilaiUAS){
return this.nilaiUAS = nilaiUAS;
}
public double getnilaiTugas(double nilaiTugas){
return this.nilaiTugas = nilaiTugas;
}
public double getnilaiTotal(double nilaiTotal){
return this.nilaiTotal = (nilaiUTS + nilaiUAS + nilaiTugas)/3;
}
void getHasil() {
System.out.println(
"======NILAI======" + "\n" +
"Nilai UTS : " + this.nilaiUTS + "\n" +
"Nilai UAS : " + this.nilaiUAS + "\n" +
"Nilai Tugas : " + this.nilaiTugas + "\n" +
"Nilai Total : " + nilaiTotal + "\n"
);
}
}
Writable
Smart Insert
4 : 21 : 71


eclipse-workspace - pbo-module3/src/M3/NilaiDemo.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
manifest.mf
Nilai.java
NilaiDemo.java
LocalVariable.java
Pegawai.java
PegawaiDemo.java
LocalVaribleDemo.java
package M3;
public class NilaiDemo {
public static void main(String[] args) {
Nilai Score = new Nilai();
Score.getnilaiUTS(90);
Score.getnilaiUAS(94);
Score.getnilaiTugas(95);
Score.getnilaiTotal(0);
Score.getHasil();
}
}
Writable
Smart Insert
15 : 1 : 247


eclipse-workspace - pbo-module3/src/M3/NilaiDemo.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
manifest.mf Nilai.java NilaiDemo.java LocalVariable.java Pegawai.java PegawaiDemo.java LocalVaribleDemo.java
1 package M3;
2
3 public class NilaiDemo {
4 public static void main(String[] args) {
5 Nilai Score = new Nilai();
6
7 Score.getnilaiUTS(90);
Console
<terminated> NilaiDemo [Java Application] C:\Users\Asus\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.4.v20220903-1038\jre\bin\javaw.exe (Sep 29, 2022, 11:34:13 PM – 11:34:13 PM) [pid: 6760]
======NILAI======
Nilai UTS : 90.0
Nilai UAS : 94.0
Nilai Tugas : 95.0
Nilai Total : 93.0
Writable
Smart Insert
15 : 1 : 247