OBJECT ORIENTED PROGRAMMING WORK

MODULE 6

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INFORMATICS STUDY PROGRAM

FACULTY OF COMMUNICATION AND INFORMATION SCIENCE

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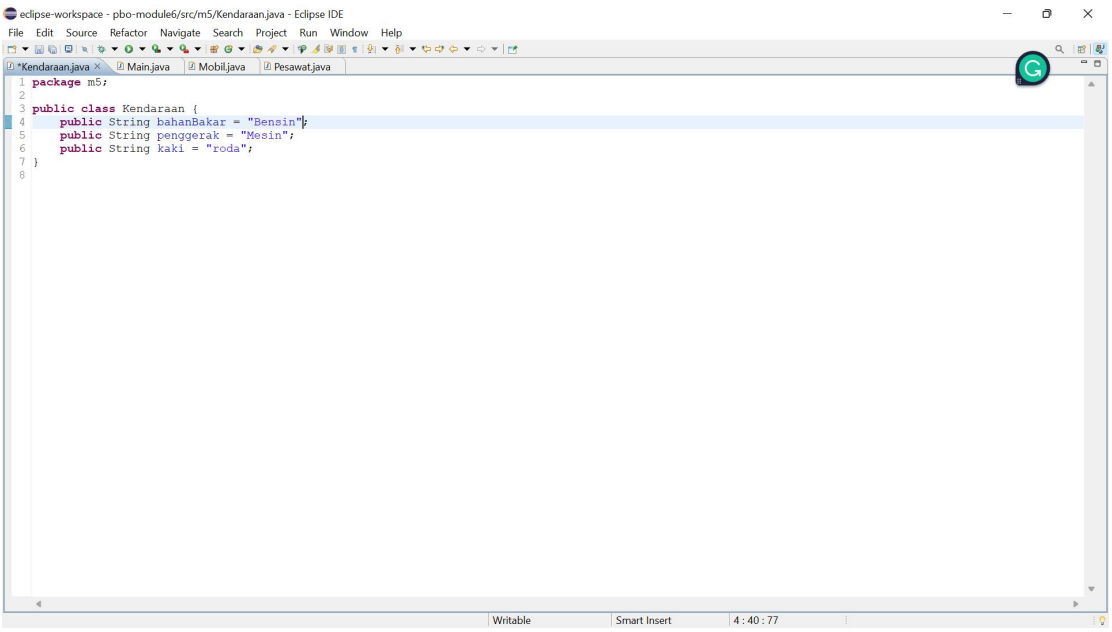
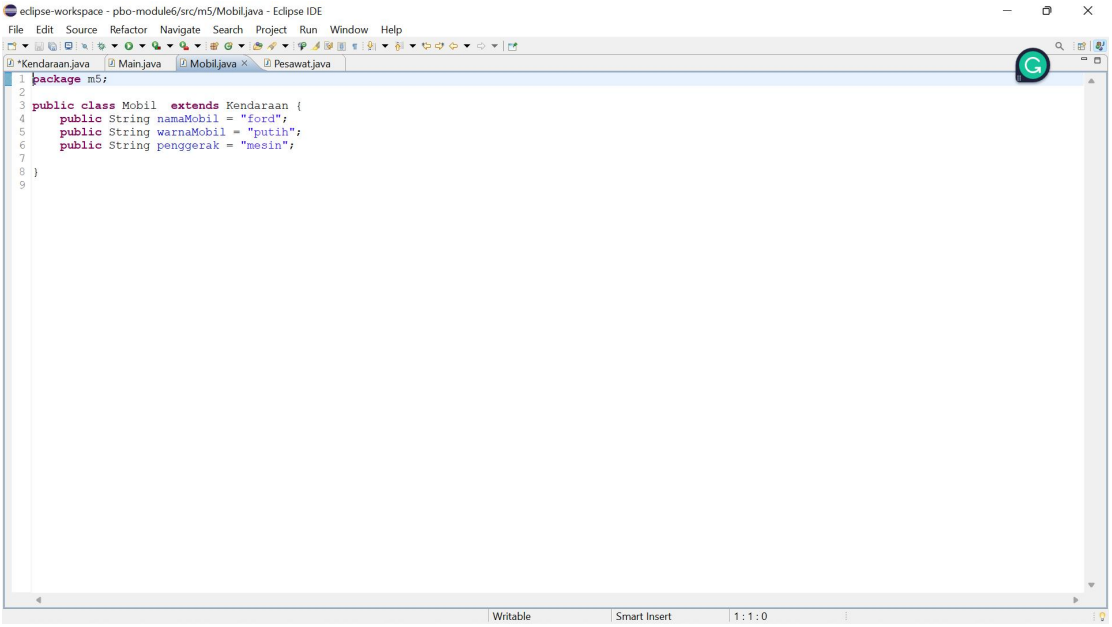
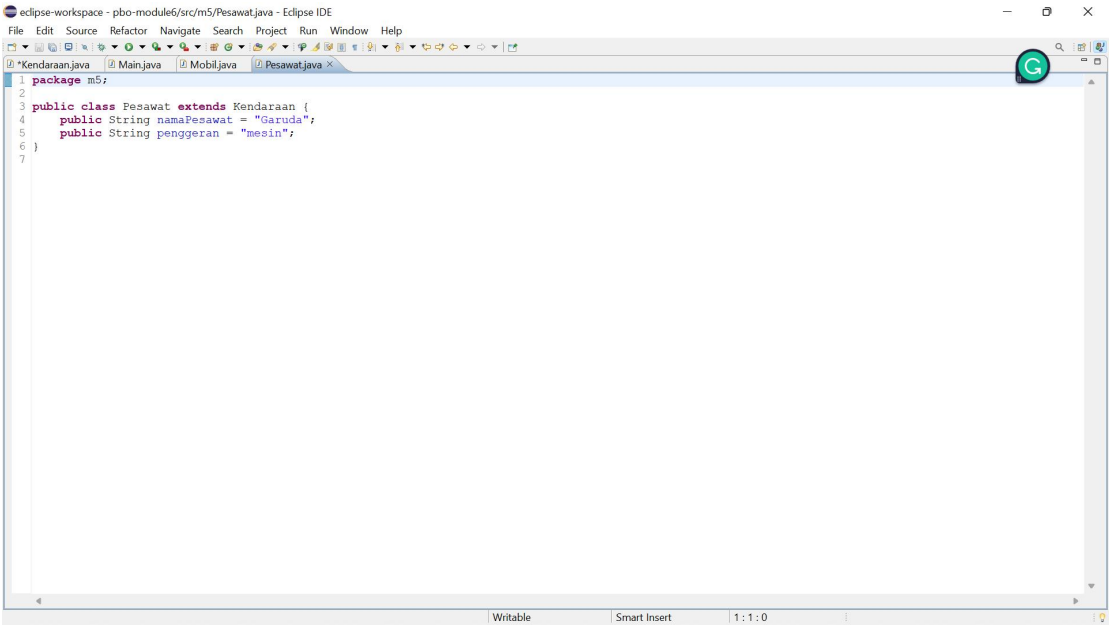
1.Create a Vehicle class, which has at least 3 instance variables that have initial values. After that, create Car and Airplane classes, each of which is a subclass of Vehicle.

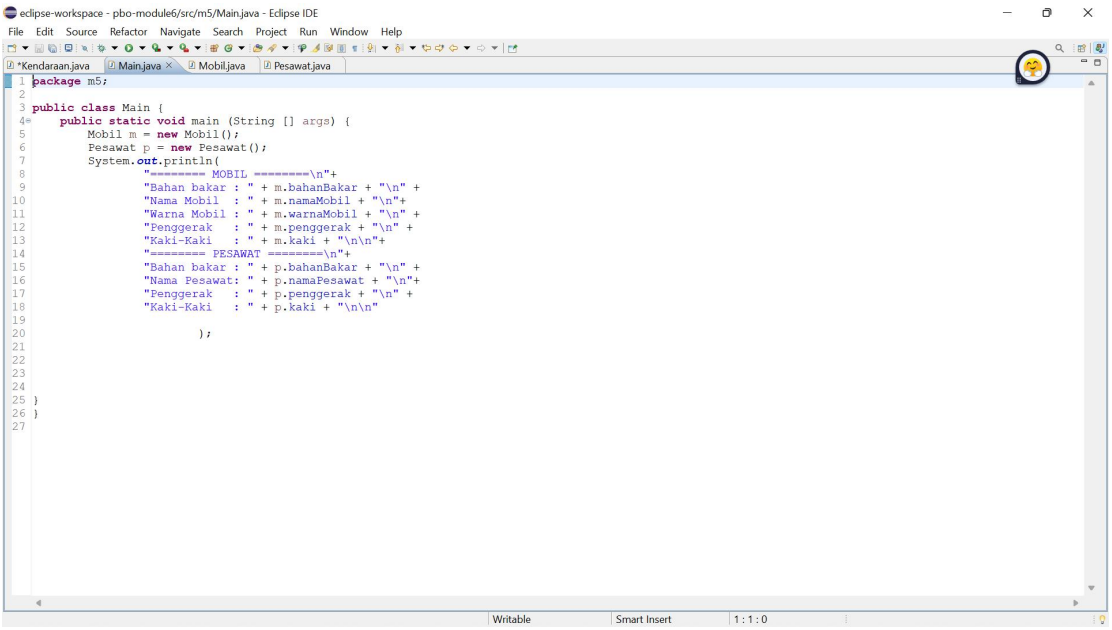
2. From each subclass, there is 1 unique variable that has an initial value, which is not found in the superclass, and 1 variable has an initial value - has the same name as the name of the variable in its superclass. Here's the source code:



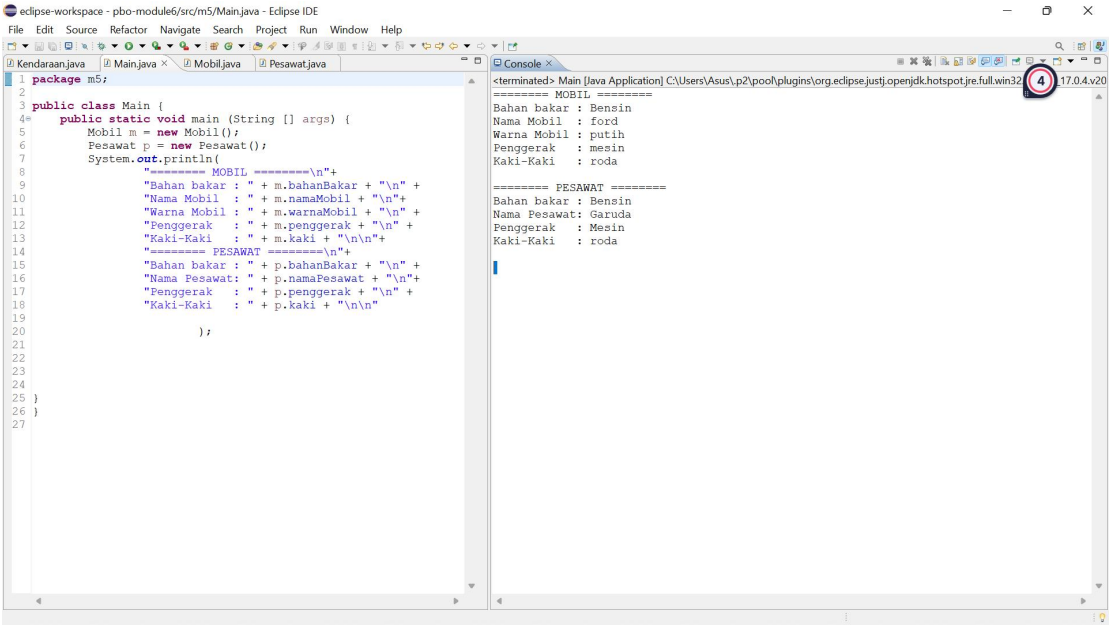




3. Create a main class to display the results of the code above. The main method will display the values stored in all instance variables contained in the subclass and superclass. Here is the source code and the output:



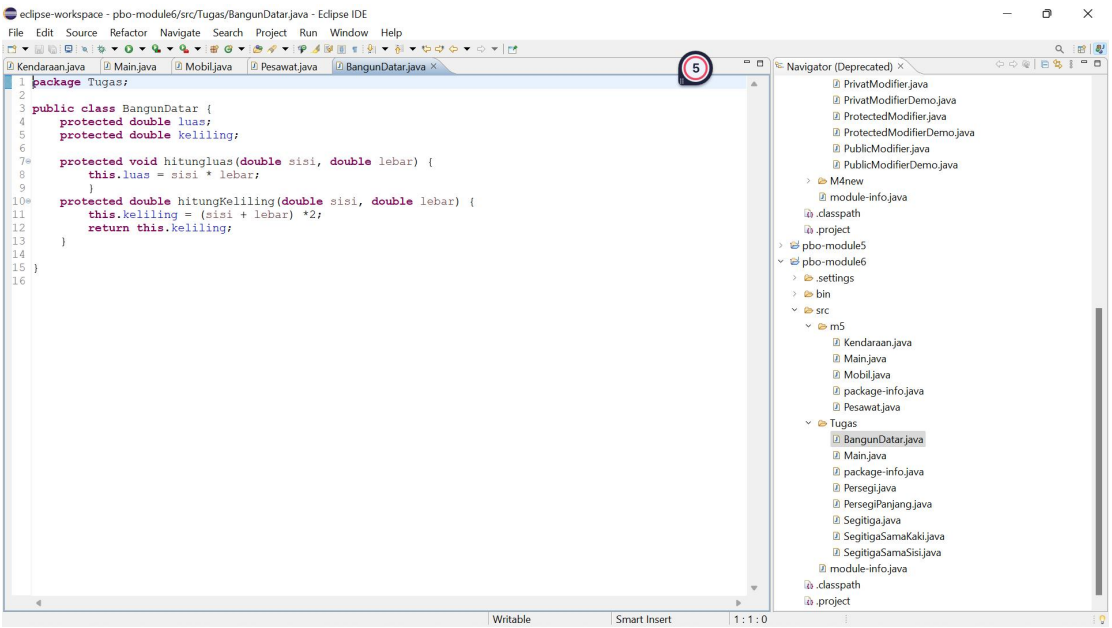
Output:



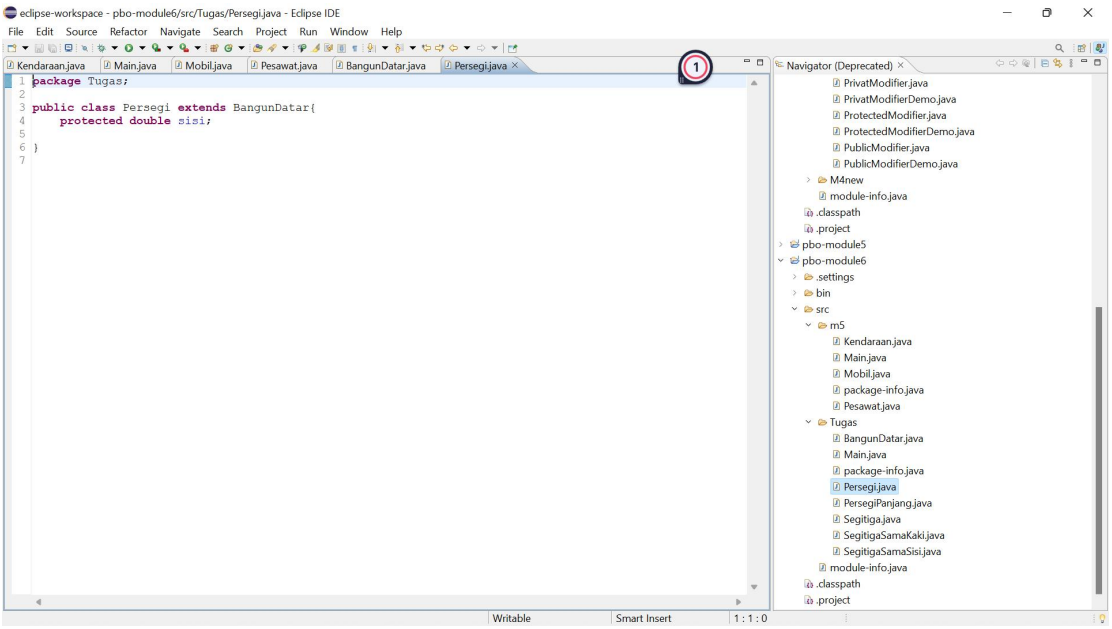
Task

The following is the program code that I made based on Figure 6.3 in the module:

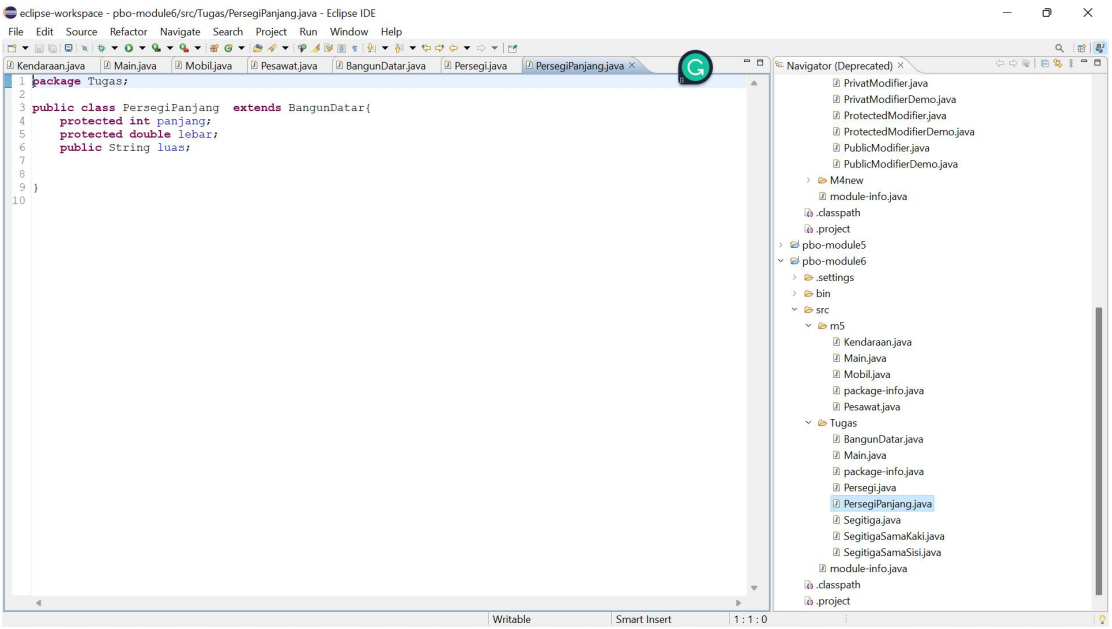
Two-dimentional figure



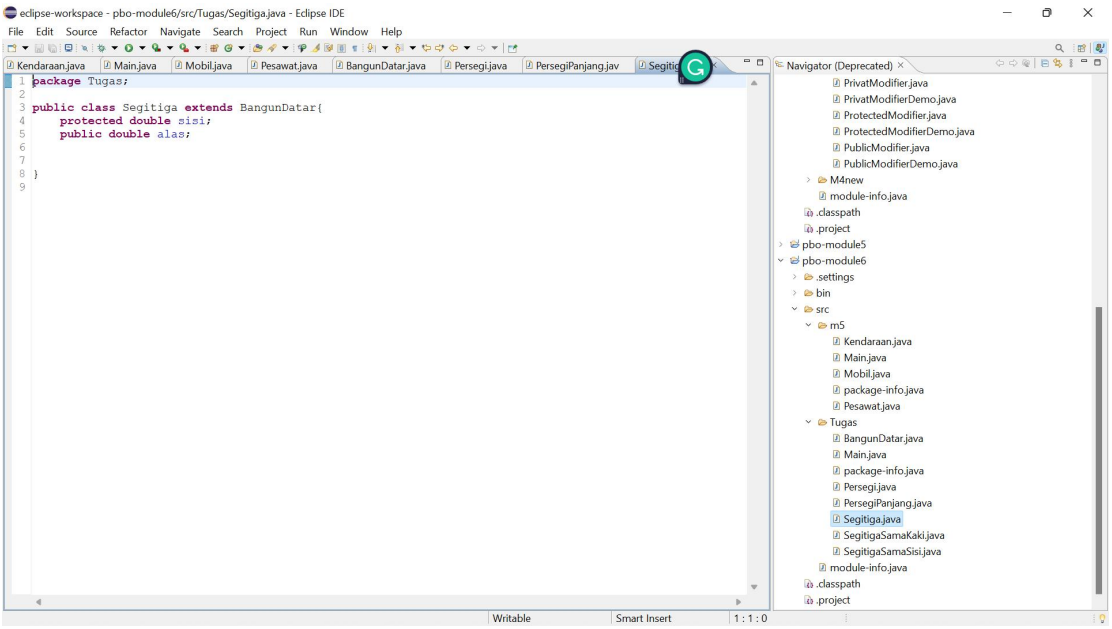
Rectangle



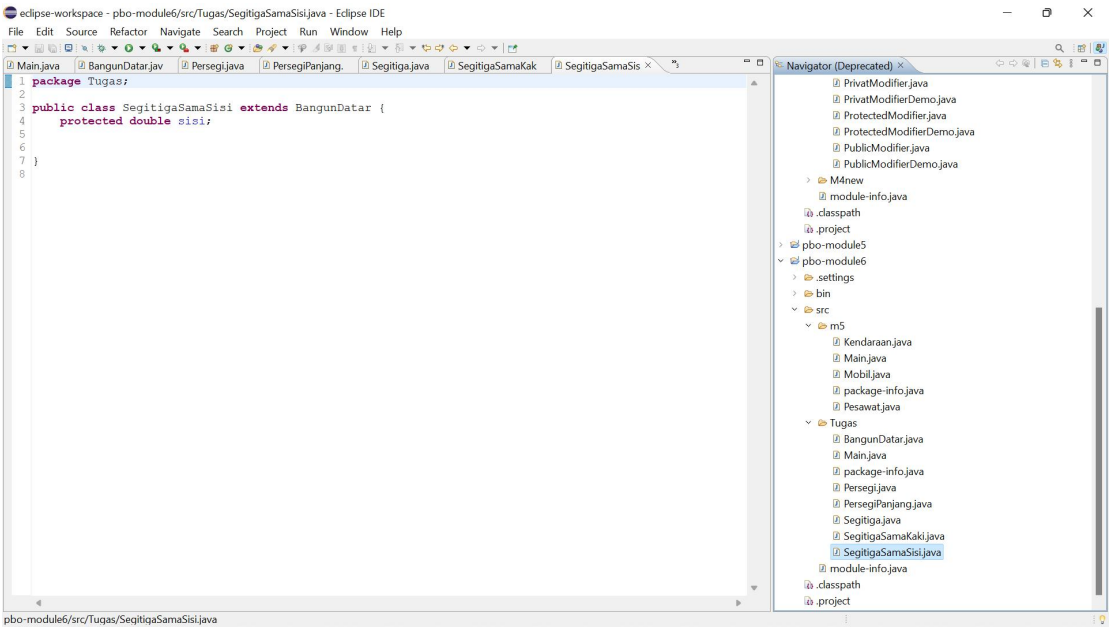
Rectangular



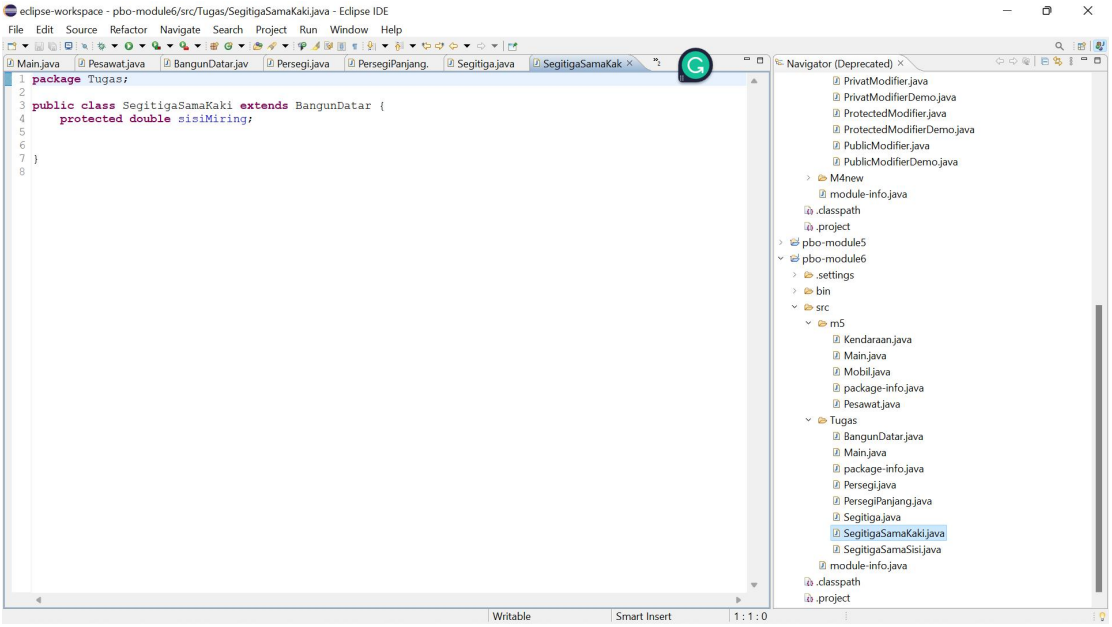
Triangle



Equilateral triangle



Isosceles triangle



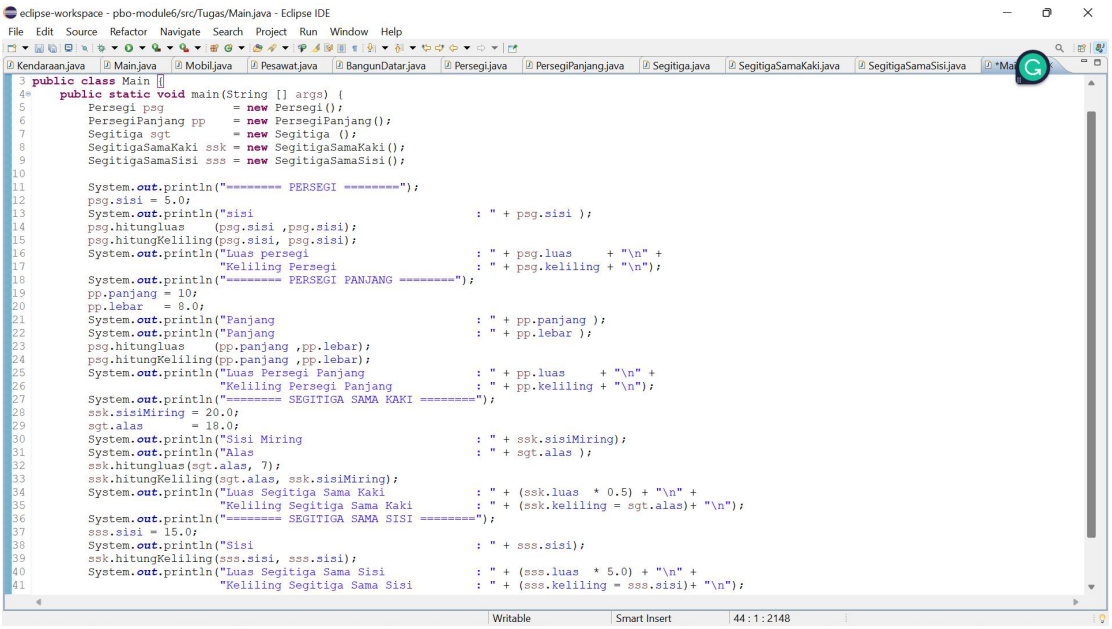
```
package Tugas;

public class SegitigaSamaKaki extends BangunDatar {
    protected double sisiMiring;


}

```

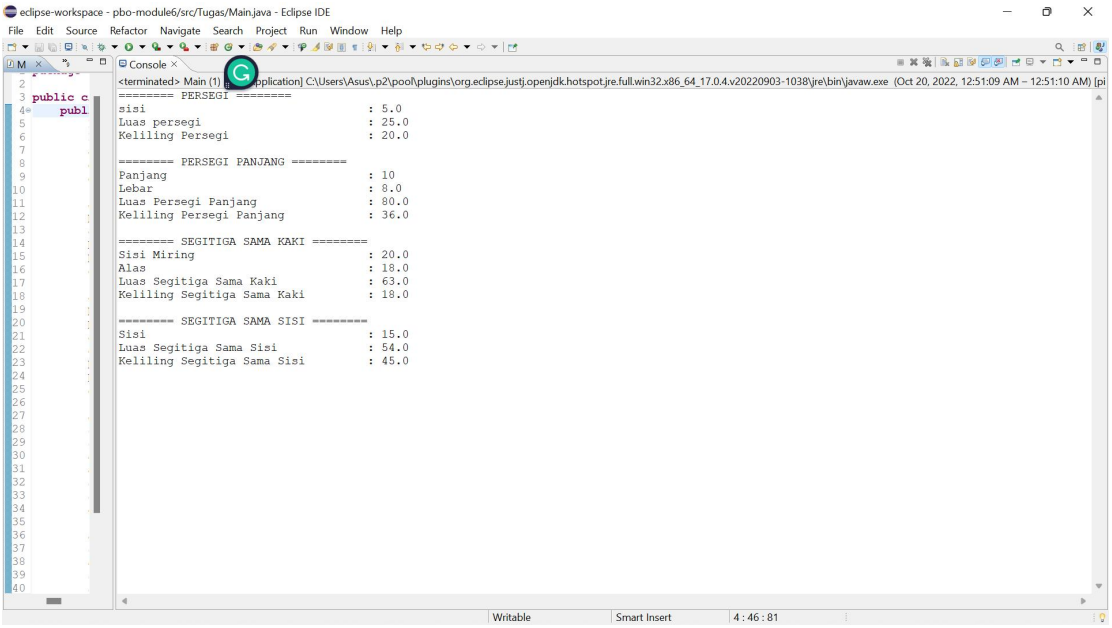
Main Class



```
public class Main {
    public static void main(String [] args) {
        Persegi psg          = new Persegi();
        PersegiPanjang pp    = new PersegiPanjang();
        Segitiga sgt         = new Segitiga ();
        SegitigaSamaKaki ssk = new SegitigaSamaKaki();
        SegitigaSamaSisi sss = new SegitigaSamaSisi();

        System.out.println("======== PERSEGI ========");
        psg.sisi = 5.0;
        System.out.println("sisi                                : " + psg.sisi );
        psg.hitungluas    (psg.sisi ,psg.sisi);
        psg.hitungKeliling(psg.sisi, psg.sisi);
        System.out.println("Luas persegi                        : " + psg.luas     + "\n" +
                           "Keliling Persegi                    : " + psg.keliling + "\n");
        System.out.println("======== PERSEGI PANJANG ========");
        pp.panjang = 10;
        pp.lebar   = 8.0;
        System.out.println("Panjang                             : " + pp.panjang );
        System.out.println("Panjang                             : " + pp.lebar );
        psg.hitungluas    (pp.panjang ,pp.lebar);
        psg.hitungKeliling(pp.panjang ,pp.lebar);
        System.out.println("Luas Persegi Panjang                : " + pp.luas     + "\n" +
                           "Keliling Persegi Panjang            : " + pp.keliling + "\n");
        System.out.println("======== SEGITIGA SAMA KAKI ========");
        ssk.sisiMiring = 20.0;
        sgt.alas       = 18.0;
        System.out.println("Sisi Miring                         : " + ssk.sisiMiring);
        System.out.println("Alas                                : " + sgt.alas );
        ssk.hitungluas(sgt.alas, 7);
        ssk.hitungKeliling(sgt.alas, ssk.sisiMiring);
        System.out.println("Luas Segitiga Sama Kaki             : " + (ssk.luas  * 0.5) + "\n" +
                           "Keliling Segitiga Sama Kaki         : " + (ssk.keliling = sgt.alas)+ "\n");
        System.out.println("======== SEGITIGA SAMA SISI ========");
        sss.sisi = 15.0;
        System.out.println("Sisi                                : " + sss.sisi);
        ssk.hitungKeliling(sss.sisi, sss.sisi);
        System.out.println("Luas Segitiga Sama Sisi             : " + (sss.luas  * 5.0) + "\n" +
                           "Keliling Segitiga Sama Sisi         : " + (sss.keliling = sss.sisi)+ "\n");
```

Output


eclipse-workspace - pbo-module6/src/Tugas/Main.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Console
<terminated> Main (1) [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 (Oct 20, 2022, 12:51:09 AM – 12:51:10 AM) [pi
======== PERSEGI ========
sisi : 5.0
Luas persegi : 25.0
Keliling Persegi : 20.0
======== PERSEGI PANJANG ========
Panjang : 10
Lebar : 8.0
Luas Persegi Panjang : 80.0
Keliling Persegi Panjang : 36.0
======== SEGITIGA SAMA KAKI ========
Sisi Miring : 20.0
Alas : 18.0
Luas Segitiga Sama Kaki : 63.0
Keliling Segitiga Sama Kaki : 18.0
======== SEGITIGA SAMA SISI ========
Sisi : 15.0
Luas Segitiga Sama Sisi : 54.0
Keliling Segitiga Sama Sisi : 45.0
Writable
Smart Insert
4 : 46 : 81