

Program1.java - Notepad

```
File Edit Format View Help
public class Program1{
    public static void main(String[] args) {
        System.out.println("Hello world");
    }
}
```

C:\Windows\system32\cmd.exe

```
C:\PBO>javac Program1.java
C:\PBO>java Program1
Hello World
C:\PBO>
```

The image shows three windows side-by-side:

- RotiDemo.java - Notepad**: A Java class named RotiDemo with a main method. It creates a Roti object, sets its properties (warna: Hijau, rasa: Pandan, berat: 30), and prints its details.
- Roti.java - Notepad**: A Java class named Roti with methods for setting color, flavor, weight, price, and printing information.
- C:\ C:\Windows\system32\cmd.exe**: A command-line window showing the output of running the RotiDemo class. It prints "Warna Roti : Hijau", "Rasa Roti : Pandan", "Berat Roti : 30", and "Harga Roti : 6000.0".

```
public class RotiDemo{
    public static void main(String[] args){
        Roti roti = new Roti();
        roti.beriwarna("Hijau");
        roti.beriRasa("Pandan");
        roti.timbangBerat(30);
        roti.hargaJual(6000);
        roti.infoRoti();
    }
}

public class Roti {
    String warna;
    String rasa;
    int berat;
    double harga;

    void beriwarna(String warnaRoti){
        warna = warnaRoti;
    }

    void beriRasa(String rasaRoti){
        rasa = rasaRoti;
    }

    void timbangBerat(int beratRoti){
        berat = beratRoti;
    }

    void hargaJual(double hargaRoti){
        harga = hargaRoti;
    }

    void infoRoti(){
        System.out.println(
            "Warna Roti : " + warna + "\n" +
            "Rasa Roti : " + rasa + "\n" +
            "Berat Roti : " + berat + "\n" +
            "Harga Roti : " + harga);
    }
}

C:\PBO>javac RotiDemo.java
C:\PBO>java RotiDemo
Warna Roti : Hijau
Rasa Roti : Pandan
Berat Roti : 30
Harga Roti : 6000.0
C:\PBO>
```

C:\Windows\system32\cmd.exe

```
C:\gntr>javac CarDemo.java
CarDemo.java:9: error: cannot find symbol
        car1.printInfo();
               ^
symbol:   method printInfo()
location: variable car1 of type Car
CarDemo.java:14: error: cannot find symbol
        car2.printInfo();
               ^
symbol:   method printInfo()
location: variable car2 of type Car
2 errors

C:\gntr>javac CarDemo.java

C:\gntr>java CarDemo
Cadence Car : 50
Speed Car : 20
Gear Car : 2
Cadence Car : 30
Speed Car : 10
Gear Car : 1

C:\gntr>
```

CarDemo.java - Notepad

```
File Edit Format View Help
public class CarDemo{
    public static void main(String[] args) {
        Car car1 = new Car();
        Car car2 = new Car();

        car1.changeCadence(50);
        car1.speedup(20);
        car1.changeGear(2);
        car1.infoCar();

        car2.changeCadence(30);
        car2.speedup(10);
        car2.changeGear(1);
        car2.infoCar();
    }
}
```

Car.java - Notepad

```
File Edit Format View Help
public class Car {
    int cadence;
    int speed;
    int gear;

    void changeCadence(int cadenceCar){
        cadence = cadenceCar;
    }

    void speedup(int speedCar){
        speed = speedCar;
    }

    void changeGear(int gearCar){
        gear = gearCar;
    }

    void infoCar(){
        System.out.println(
            "Cadence Car : " + cadence + "\n" +
            "Speed Car : " + speed + "\n" +
            "Gear Car : " + gear);
    }
}
```

The image shows three windows side-by-side:

- RotiDemo.java - Notepad**: A Java class named RotiDemo with a main method. It creates a Roti object, sets its properties (warna: Hijau, rasa: Pandan, berat: 30), and prints its details.
- Roti.java - Notepad**: A Java class named Roti with methods for setting color, flavor, weight, price, and printing information.
- C:\ C:\Windows\system32\cmd.exe**: A command-line window showing the output of running the RotiDemo class. It displays the properties of the created Roti object.

```
public class RotiDemo{
    public static void main(String[] args){
        Roti roti = new Roti();
        roti.beriwarna("Hijau");
        roti.beriRasa("Pandan");
        roti.timbangBerat(30);
        roti.hargaJual(6000);
        roti.infoRoti();
    }
}

public class Roti {
    String warna;
    String rasa;
    int berat;
    double harga;

    void beriwarna(String warnaRoti){
        warna = warnaRoti;
    }

    void beriRasa(String rasaRoti){
        rasa = rasaRoti;
    }

    void timbangBerat(int beratRoti){
        berat = beratRoti;
    }

    void hargaJual(double hargaRoti){
        harga = hargaRoti;
    }

    void infoRoti(){
        System.out.println(
            "Warna Roti : " + warna + "\n" +
            "Rasa Roti : " + rasa + "\n" +
            "Berat Roti : " + berat + "\n" +
            "Harga Roti : " + harga);
    }
}

C:\PBO>javac RotiDemo.java
C:\PBO>java RotiDemo
Warna Roti : Hijau
Rasa Roti : Pandan
Berat Roti : 30
Harga Roti : 6000.0
C:\PBO>
```

C:\Windows\system32\cmd.exe

```
C:\gntr>javac KaosDemo.java
C:\gntr>java KaosDemo
Warna Kaos : Hitam
Bahan Kaos : Katun
Berat Kaos : 500
Harga Kaos : 200000.0
C:\gntr>
```

KaosDemo.java - Notepad

```
File Edit Format View Help
public class KaosDemo{
    public static void main(String[] args){
        Kaos kaos = new Kaos();
        kaos.beriwarna("Hitam");
        kaos.beriBahan("Katun");
        kaos.timbangBerat(500);
        kaos.hargaJual(200000);
        kaos.infoKaos();
    }
}
```

Kaos.java - Notepad

```
File Edit Format View Help
public class Kaos {
    String warna;
    String bahan;
    int berat;
    double harga;

    void beriwarna(String warnaKaos){
        warna = warnaKaos;
    }

    void beriBahan(String bahanKaos){
        bahan = bahanKaos;
    }

    void timbangBerat(int beratKaos){
        berat = beratKaos;
    }

    void hargaJual(double hargaKaos){
        harga = hargaKaos;
    }

    void infoKaos(){
        System.out.println(
            "Warna Kaos : " + warna + "\n" +
            "Bahan Kaos : " + bahan + "\n" +
            "Berat Kaos : " + berat + "\n" +
            "Harga Kaos : " + harga);
    }
}
```

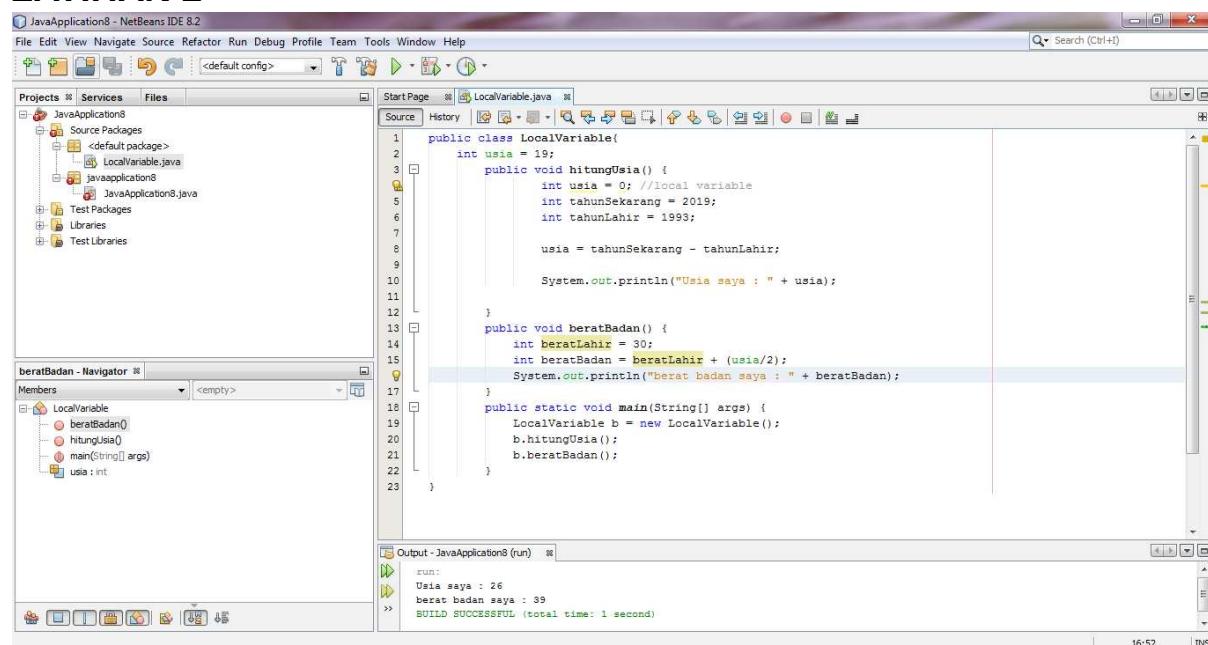
# MODUL 3 PRAKTIKUM PBO

Nama : Guntur Jatmiko  
NIM : L200180039  
Kelas : B

## LATIHAN 1

tidak bisa karena tidak bisa diakses dari semua method yang menjadi member dari class, sehingga tidak dapat memanipulasi nilai dari variable global tersebut

## LATIHAN 2



The screenshot shows the NetBeans IDE interface with the following details:

- Project Explorer:** Shows two projects: "JavaApplication8" and "JavaApplication8". Under "JavaApplication8", there is a "Source Packages" node containing a file named "LocalVariable.java".
- Code Editor:** Displays the content of "LocalVariable.java". The code defines a class "LocalVariable" with methods "hitungUsia()", "beratBadan()", and a "main" method. It also declares a global variable "usia".

```
public class LocalVariable{
    int usia = 19;
    public void hitungUsia() {
        int usia = 0; //local variable
        int tahunSekarang = 2019;
        int tahunLahir = 1993;

        usia = tahunSekarang - tahunLahir;

        System.out.println("Usia saya : " + usia);
    }
    public void beratBadan() {
        int beratLahir = 30;
        int beratBadan = beratLahir + (usia/2);
        System.out.println("berat badan saya : " + beratBadan);
    }
    public static void main(String[] args) {
        LocalVariable b = new LocalVariable();
        b.hitungUsia();
        b.beratBadan();
    }
}
```
- Output Window:** Shows the run output:

```
run:
Usia saya : 26
berat badan saya : 39
BUILD SUCCESSFUL (total time: 1 second)
```

## **LATIHAN 3**

```
Output - LocalVariable (run) x
run:
edi
123
1200000.0

galih
124
1250000.0

guntur
125
1200000.0

satria
126
1200000.0

tito
127
1000000.0

BUILD SUCCESSFUL (total time: 0 seconds)
```

## TUGAS/ PR

The screenshot shows a Java IDE interface. The top bar includes tabs for 'Source' and 'History', along with various tool icons. The main area displays a Java code editor with line numbers from 12 to 37. The code defines a class 'Nilai' with methods for setting values and calculating averages. The 'info()' method uses System.out.println to display the result. The 'main()' method creates an instance and calls these methods. The bottom window, titled 'Output - LocalVariable (run)', shows the execution results: 'run:', 'Nilai rata-rata 95.5', and 'BUILD SUCCESSFUL (total time: 0 seconds)'.

```
12 public class Nilai {
13     double nilaiUTS;
14     double nilaiUAS;
15     double nilaiTugas;
16     double nilaiTotal;
17
18     public void nilai(double nilaiUTS, double nilaiUAS, double nilaiTugas){
19         this.nilaiUTS = nilaiUTS;
20         this.nilaiUAS = nilaiUAS;
21         this.nilaiTugas = nilaiTugas;
22     }
23
24     public double tambahkan(){
25         return nilaiTotal = (nilaiUTS+nilaiUAS+nilaiTugas)/3;
26     }
27
28     public void info(){
29         System.out.println("Nilai rata-rata " + nilaiTotal);
30     }
31
32     public static void main(String[] args){
33         Nilai a = new Nilai();
34         a.nilai(99.5,99,88);
35         a.tambahkan();
36         a.info();
37     }
}
```

Output - LocalVariable (run) x

```
run:
Nilai rata-rata 95.5
BUILD SUCCESSFUL (total time: 0 seconds)
```

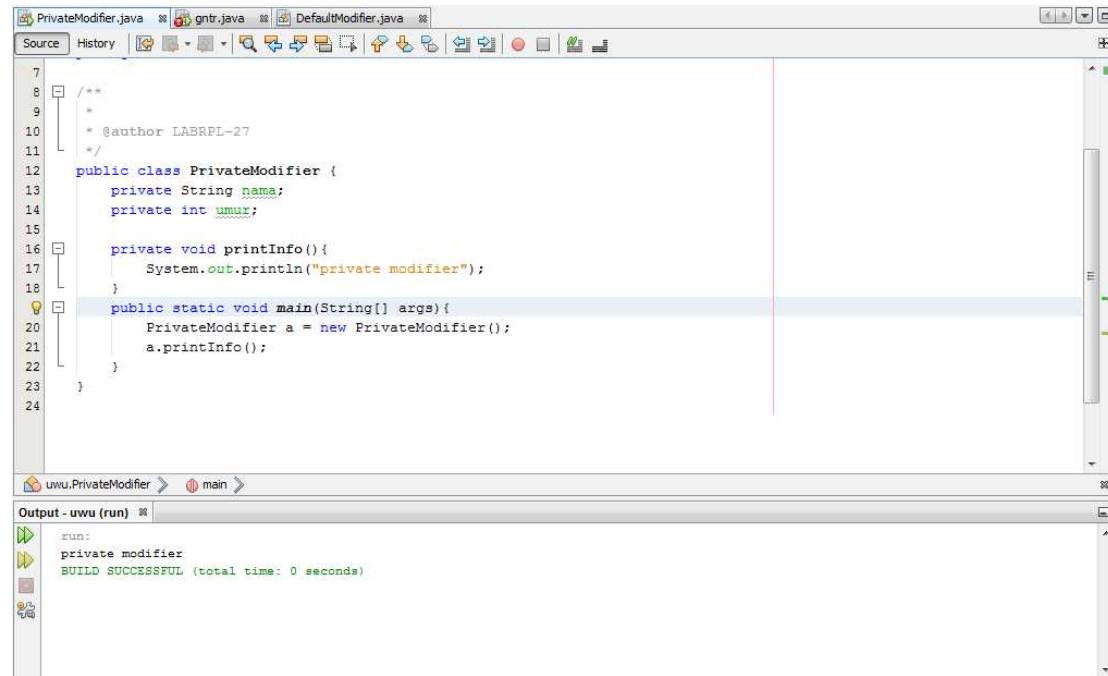
## PRAKTIKUM MODUL 4

Nama : Guntur Jatmiko

Nama : L200180039

Kelas : B

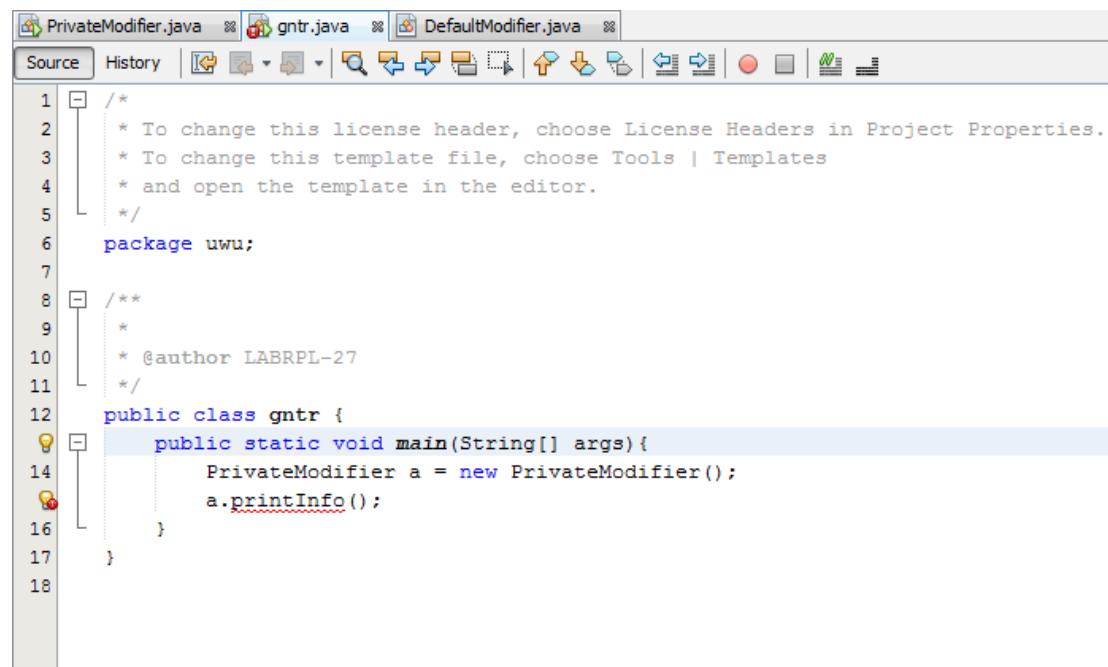
### PRIVATE MODIFIER



```
7
8  /**
9   * @author LABRPL-27
10  */
11 public class PrivateModifier {
12     private String name;
13     private int umur;
14
15     private void printInfo(){
16         System.out.println("private modifier");
17     }
18
19     public static void main(String[] args){
20         PrivateModifier a = new PrivateModifier();
21         a.printInfo();
22     }
23 }
24
```

Output - uwu (run) :

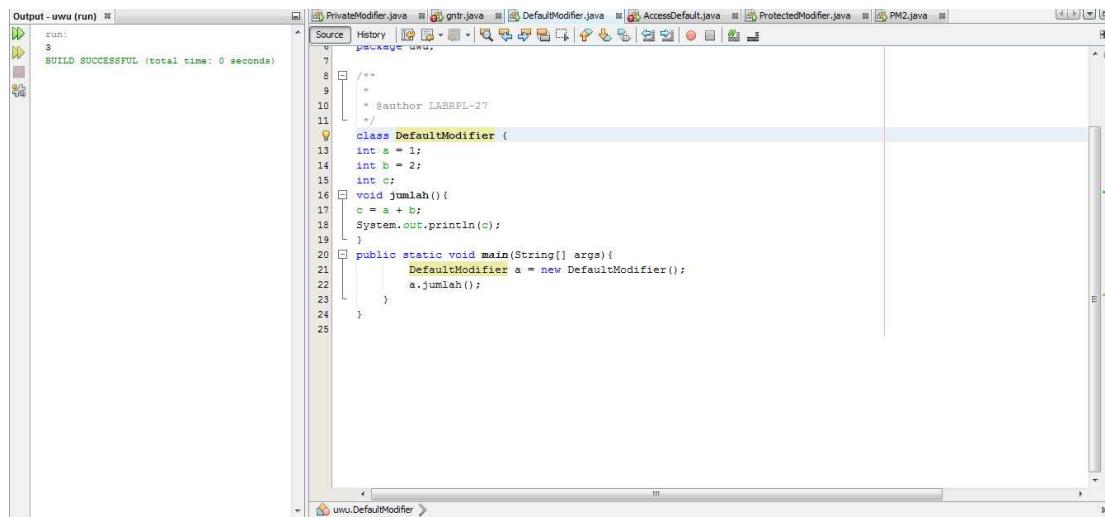
```
run:
private modifier
BUILD SUCCESSFUL (total time: 0 seconds)
```



```
1  /*
2   * To change this license header, choose License Headers in Project Properties.
3   * To change this template file, choose Tools | Templates
4   * and open the template in the editor.
5   */
6  package uwu;
7
8  /**
9   * @author LABRPL-27
10  */
11 public class gntr {
12     public static void main(String[] args){
13         PrivateModifier a = new PrivateModifier();
14         a.printInfo();
15     }
16 }
17
18
```

Tidak dapat diakses, hanya dapat diakses didalam package dan class yang sama.

## DEFAULT MODIFIER

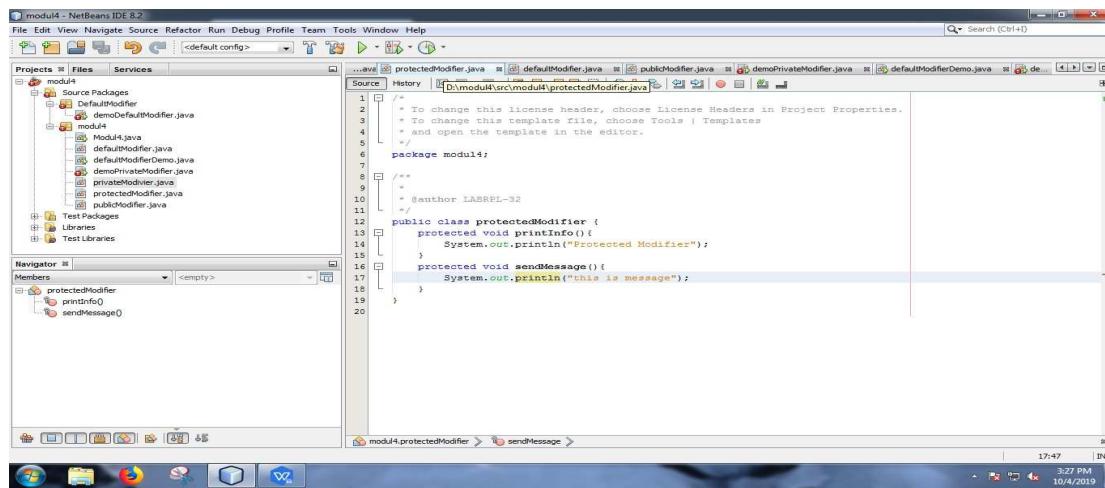


The screenshot shows the NetBeans IDE interface with the title bar "Output - uwu (run)". The left sidebar displays a project structure with files like PrivateModifier.java, gnt.java, DefaultModifier.java, AccessDefault.java, ProtectedModifier.java, and PM2.java. The main editor window contains the code for DefaultModifier.java:

```
run:  
3  
BUILD SUCCESSFUL (total time: 0 seconds)  
  
7 package uwu;  
8 /*  
9  * @author LABRPL-27  
10 */  
11  
12 class DefaultModifier {  
13     int a = 1;  
14     int b = 2;  
15     int c;  
16     void jumlah(){  
17         c = a + b;  
18         System.out.println(c);  
19     }  
20     public static void main(String[] args){  
21         DefaultModifier a = new DefaultModifier();  
22         a.jumlah();  
23     }  
24 }  
25
```

2. ) Tidak bisa diakses karena Default Modifier dapat diakses di class yang berbeda namun dalam package yang sama

## PROTECTED MODIFIER



The screenshot shows the NetBeans IDE interface with the title bar "modul4 - NetBeans IDE 8.2". The left sidebar displays a project structure with files like protectedModifier.java, defaultModifier.java, publicModifier.java, demoPrivateModifier.java, defaultModifierDemo.java, and de...de. The main editor window contains the code for protectedModifier.java:

```
1 // To change this license header, choose License Headers in Project Properties.  
2 // To change this template file, choose Tools | Templates  
3 // and open the template in the editor.  
4  
5 package modul4;  
6  
7 /*  
8  * @author LABRPL-32  
9  */  
10  
11 public class protectedModifier {  
12     protected void printInfo(){  
13         System.out.println("Protected Modifier");  
14     }  
15     protected void sendMessage(){  
16         System.out.println("this is message");  
17     }  
18 }  
19  
20
```

modul4 - NetBeans IDE 8.2

## Latihan

Output - uwu (run) ☐

## **PRAKTIKUM MODUL 5**

**Nama : Guntur Jatmiko**

**NIM : L200180039**

**Kelas : B**

## Latihan 1

The screenshot shows the NetBeans IDE 8.2 interface. The title bar says "bab5 - NetBeans IDE 8.2". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has icons for New Project, Open Project, Save, Undo, Redo, Cut, Copy, Paste, Find, Replace, and Run.

The Projects tab shows a project named "bab5" with two source packages: "bab5" and "Praktikum PBO kelas X". The "bab5" package contains files "Bab5.java", "Constructor.java", and "main.java". The "Praktikum PBO kelas X" package contains files "praktikum.pbo.kelas.x", "PraktikumPBOkelasX.java", "RotiDemo.java", and "roti.java".

The Source tab displays the code for "Constructor.java". The code defines a class "Constructor" with a constructor that prints the name, nim, and address to the console.

```
9  *  
10 * @author LABRFL-27  
11 */  
12 public class Constructor {  
13     String nama = "Guntur";  
14     String nim = "L200180039";  
15     String alamat = "Sragen";  
16  
17     public Constructor(){  
18         System.out.println("nama :" + nama );  
19         System.out.println("nim :" + nim );  
20         System.out.println("alamat :" + alamat );  
21     }  
22 }  
23
```

The Output tab shows the run results:

```
run:  
nama :Guntur  
nim :L200180039  
alamat :Sragen  
BUILD SUCCESSFUL (total time: 0 seconds)
```

The status bar at the bottom right shows the date and time: 10/11/2019, 3:08 PM, and the system tray icons.

This screenshot shows the NetBeans IDE 8.2 interface again, but with a different file open. The title bar says "bab5 - NetBeans IDE 8.2". The menu bar and toolbar are identical to the previous screenshot.

The Projects tab shows the same project structure as before.

The Source tab displays the code for "main.java". The code defines a class "main" with a static main method that creates an instance of "Constructor".

```
1  /*  
2  * To change this license header, choose License Headers in Project Properties.  
3  * To change this template file, choose Tools | Templates  
4  * and open the template in the editor.  
5  */  
6 package bab5;  
7  
8 /**  
9  *  
10 * @author LABRFL-27  
11 */  
12 public class main {  
13     public static void main(String[] args){  
14         Constructor g = new Constructor();  
15     }  
16 }  
17  
18
```

The Output tab shows the run results:

```
run:  
nama :Guntur  
nim :L200180039  
alamat :Sragen  
BUILD SUCCESSFUL (total time: 0 seconds)
```

The status bar at the bottom right shows the date and time: 10/11/2019, 3:09 PM, and the system tray icons.

## Latihan 2

The screenshot shows the NetBeans IDE 8.2 interface. The title bar reads "bab5 - NetBeans IDE 8.2". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has icons for New Project, Open Project, Save, Run, Stop, and others. The left sidebar shows Projects, Files, Services, and Navigator. The main area has tabs for Constructor.java, main.java, PC1.java, CA1.java, PC.java, and CA.java. The left pane is titled "Output - bab5 (run)" and displays the following run output:

```
run:
Nama Pengarang :Jatmiko
Judul Buku : Mencintai tanpa tersakiti
Tahun Terbit : 2019
Cetakan Ke : 99
Harga Jual : 1000000.0
Nama Pengarang :Suryo
Judul Buku : ora umum
Tahun Terbit : 2009
Cetakan Ke : 29
Harga Jual : 10000.0
Nama Pengarang :Paijo
Judul Buku : cyberpunk
Tahun Terbit : 2077
Cetakan Ke : 77
Harga Jual : 25000.0
Nama Pengarang :Cory
Judul Buku : ok
Tahun Terbit : 2014
Cetakan Ke : 0
Harga Jual : 0.0
Nama Pengarang :Gore
Judul Buku : sip
Tahun Terbit : 2016
Cetakan Ke : 0
Harga Jual : 0.0
Nama Pengarang :Bray
Judul Buku : mantap
Tahun Terbit : 2016
Cetakan Ke : 0
Harga Jual : 0.0
Nama Pengarang :null
Judul Buku : null
Tahun Terbit : 2014
Cetakan Ke : 2
Harga Jual : 1000000.0
Nama Pengarang :null
```

The right pane shows the Java code for the PC class:

```
13     String namaPengarang, judulBuku;
14     int tahunTerbit, cetakanKe;
15     double hargaJual;
16
17     public PC(String namaPengarang, String judulBuku, int tahunTerbit, int cetakanKe, double hargaJual){
18         this.namaPengarang = namaPengarang;
19         this.judulBuku = judulBuku;
20         this.tahunTerbit = tahunTerbit;
21         this.cetakanKe = cetakanKe;
22         this.hargaJual = hargaJual;
23     }
24     public PC(String namaPengarang, String judulBuku, int tahunTerbit){
25         this.namaPengarang = namaPengarang;
26         this.judulBuku = judulBuku;
27         this.tahunTerbit = tahunTerbit;
28     }
29     public PC(int tahunTerbit, int cetakanKe, double hargaJual){
30         this.tahunTerbit = tahunTerbit;
31         this.cetakanKe = cetakanKe;
32         this.hargaJual = hargaJual;
33     }
34     public void info(){
35         System.out.println("Nama Pengarang : " + namaPengarang + "\nJudul Buku : " + judulBuku + "\nTahun Terbit : " + tahunTerbit);
36     }
37 }
```

The status bar at the bottom right shows "29:61 3:47 PM 10/11/2019 INS".

```
bab5 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
<default config> Search (Ctrl+F)
Output - bab5(run) * | Constructor.java | main.java | PC1.java | CA1.java | CA.java | CA.java |
Projects Files Services Navigator
Output - bab5(run) *
Nama Pengarang :Qory
Judul Buku : ok
Tahun Terbit : 2014
Cetakan Ke : 0
Harga Jual : 0.0
Nama Pengarang :Gore
Judul Buku : sip
Tahun Terbit : 2015
Cetakan Ke : 0
Harga Jual : 0.0
Nama Pengarang :Bray
Judul Buku : mantap
Tahun Terbit : 2016
Cetakan Ke : 0
Harga Jual : 0.0
Nama Pengarang :null
Judul Buku : null
Tahun Terbit : 2014
Cetakan Ke : 2
Harga Jual : 1000000.0
Nama Pengarang :null
Judul Buku : null
Tahun Terbit : 2003
Cetakan Ke : 3
Harga Jual : 1000000.0
Nama Pengarang :null
Judul Buku : null
Tahun Terbit : 2017
Cetakan Ke : 5
Harga Jual : 1000000.0
Nama Pengarang :null
Judul Buku : null
Tahun Terbit : 2001
Cetakan Ke : 8
Harga Jual : 1000000.0
BUILD SUCCESSFUL (total time: 0 seconds)

Source History
public class CA {
    public static void main(String[] args){
        PC a = new PC("Jatmiko", "Mencintai tanpa tersakiti", 2019, 99, 1000000);
        PC b = new PC("Suryo", "ora umum", 2009, 29, 10000);
        PC c = new PC("Pajyo", "cyberpunk", 2077, 77, 25000);
        PC d = new PC("Qory", "ok", 2014);
        PC e = new PC("Gore", "sip", 2015);
        PC f = new PC("Bray", "mantap", 2016);
        PC g = new PC(2014, 2, 1000000);
        PC h = new PC(2003, 3, 1000000);
        PC i = new PC(2017, 5, 1000000);
        PC j = new PC(2001, 8, 1000000);
        a.info();
        b.info();
        c.info();
        d.info();
        e.info();
        f.info();
        g.info();
        h.info();
        i.info();
        j.info();
    }
}
bab5.CA > main > c >
```

## PARAMETERIZED CONSTRUCTOR

**bab5 - NetBeans IDE 8.2**

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help Search (Ctrl+F)

Projects Files Services

Source Packages

- bab5
  - Bab5.java
  - CA1.java
  - Constructor.java
  - PC.java
  - PC1.java
  - main.java
- Test Packages
- Libraries
- Test Libraries
- Praktikum PBO kelas X
  - Source Packages
    - praktikum.pbo.kelas.x
    - PraktikumPBOKelasX.java

Navigator Members

PC1

- PC1(String nama, int semester, String nim)
  - info()
  - nama : String
  - nim : String
  - semester : int

Output - bab5 (run) \*

```
run:  
Nama :Guntur  
Nim : L200180039  
Semester : 3  
BUILD SUCCESSFUL (total time: 0 seconds)
```

21:1 3:29 PM 10/11/2019

The screenshot shows the NetBeans IDE interface with the project 'bab5' open. The 'Source' tab is selected in the editor, displaying the code for the 'PC1' class. The code defines a constructor that takes three parameters: 'String nama', 'int semester', and 'String nim'. It also includes an 'info()' method that prints the values of these variables. Below the code, the 'Output' window shows the results of a run, including the printed values 'Nama :Guntur', 'Nim : L200180039', and 'Semester : 3', followed by a 'BUILD SUCCESSFUL' message.

**bab5 - NetBeans IDE 8.2**

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help Search (Ctrl+F)

Projects Files Services

Source Packages

- bab5
  - Bab5.java
  - CA1.java
  - Constructor.java
  - PC.java
  - PC1.java
  - main.java
- Test Packages
- Libraries
- Test Libraries
- Praktikum PBO kelas X
  - Source Packages
    - praktikum.pbo.kelas.x
    - PraktikumPBOKelasX.java

Navigator Members

CA1

- main(String[] args)

Output - bab5 (run) \*

```
run:  
Nama :Guntur  
Nim : L200180039  
Semester : 3  
BUILD SUCCESSFUL (total time: 0 seconds)
```

17:6 3:29 PM 10/11/2019

The screenshot shows the NetBeans IDE interface with the project 'bab5' open. The 'Source' tab is selected in the editor, displaying the code for the 'CA1' class. The code contains a static main method that creates an instance of the 'PC1' class with the name 'Guntur', semester '3', and nim 'L200180039', then calls its 'info()' method. Below the code, the 'Output' window shows the results of a run, including the printed values 'Nama :Guntur', 'Nim : L200180039', and 'Semester : 3', followed by a 'BUILD SUCCESSFUL' message.

## tugas

bab5 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Files Services

Source Packages bab5  
Hewan  
Libraries  
Instance Variables  
Source Packages masmas

Members masmas  
  ● main(String[] args)

Source History Search (Ctrl+F)

```
1 //  
2 * To change this license header, choose License Headers in Project Properties.  
3 * To change this template file, choose Tools | Templates  
4 * and open the template in the editor.  
5  
6 package bab5;  
7  
8 /**  
9  * @author Mr.G  
10 */  
11 public class masmas {  
12     public static void main(String[] args){  
13         masgun p = new masgun();  
14         masgun pi = new masgun ("Selamat Jadi Mahasiswa UNS", 3, 2077);  
15         pi.infoms();  
16     }  
17 }  
18  
19
```

Output - bab5 (run) :

```
run:  
Selamat datang Mahasiswa UNS  
Nama : Guntri J  
NIM : L200180039  
Semester : 3  
Angkatan : 2077  
BUILD SUCCESSFUL (total time: 0 seconds)
```

bab5 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Files Services

Source Packages bab5  
Hewan  
Libraries  
Instance Variables  
Source Packages masgun

Members masgun  
  ● main(String name, String nim, int Semester, int angkatan)  
  ● masgun()  
  ● masgun(String name, String nim, int Semester, int angkatan)  
  ● Semester : int  
  ● angkatan : int  
  ● name : String  
  ● nim : String

Source History Search (Ctrl+F)

```
1 //  
2 * To change this license header, choose License Headers in Project Properties.  
3 * To change this template file, choose Tools | Templates  
4 * and open the template in the editor.  
5  
6 package bab5;  
7  
8 /**  
9  * @author Mr.G  
10 */  
11 public class masgun {  
12     String name, nim;  
13     int Semester, angkatan;  
14  
15     public masgun(){  
16         System.out.println("Selamat datang Mahasiswa UNS");  
17     }  
18     public masgun(String name, String nim, int Semester, int angkatan){  
19         this.name = name;  
20         this.nim = nim;  
21         this.Semester = Semester;  
22         this.angkatan = angkatan;  
23     }  
24  
25     public void infoms(){  
26         System.out.println(  
27             "Nama : " + name + "\n"  
28             "NIM : " + nim + "\n"  
29             "Semester : " + Semester + "\n"  
30             "Angkatan : " + angkatan  
31         );  
32     }  
33 }  
34  
35 }
```

Output - bab5 (run) :

```
run:  
Selamat datang Mahasiswa UNS  
Nama : Guntri J  
NIM : L200180039  
Semester : 3  
Angkatan : 2077  
BUILD SUCCESSFUL (total time: 0 seconds)
```

Nama : Guntur Jatmiko  
NIM : L200180039  
Kelas : B

## Laporan & Tugas praktikum modul 6

### Laporan

The screenshot shows the NetBeans IDE interface with the following details:

- File Menu:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Toolbar:** Standard NetBeans toolbar icons.
- Projects Tab:** Shows JavaApplication1, Karyawan, LocalVariable, loginform, Mahasiswa, Modul 2, Modul2.2, modul 3, nonvoid, pegawai, SafeParking, and tugas6.
- Files Tab:** Shows files like Kendaraan.java, Mobil.java, Pesawat.java, main.java, Tugas6.java, and BangunDatar.java.
- Source Editor:** Displays the main.java code:

```
1  /*
2   * To change this license header, choose License Headers in Project Properties
3   * To change this template file, choose Tools | Templates
4   * and open the template in the editor.
5   */
6  package g;
7
8  /**
9   *
10  * @author Mr.G
11  */
12 public class main {
13     public static void main(String[] args){
14         Mobil m = new Mobil();
15         Pesawat p = new Pesawat();
16
17         m.info();
18         System.out.println("=====");
19         p.info();
20     }
21
22 }
```
- Output Tab:** Shows the run output:

```
run:
Mobil bermerk Honda
dan memiliki kursi berjumlah4
Berbahan bakar dari Bensol
dengan jumlah penggerak 1 mesin
=====
Pesawat dengan maskapai Avtur
Memiliki roda 6 buah roda
dan memiliki kursi berjumlah 60
Berbahan bakar dari Bensol
dengan jumlah penggerak 6 mesin
BUILD SUCCESSFUL (total time: 0 seconds)
```

g - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects x Files Services

JavaApplication1 Karyawan LocalVariable loginform Mahasiswa Modul 2 Modul2.2 modul 3 nonvoid pegawai SafeParking tugas6

Source Packages tugas6 BangunDatar.java Persegi.java PersegiPanjang.java Tugas6.java

Pesawat - Navigator x

Members

Pesawat :: Kendaraan info() jumlahRoda : int kursi : int maskapai : String

Kendaraan.java x Mobil.java x Pesawat.java x main.java x Tugas6.java x BangunDatar.java

```
1 /* To change this license header, choose License Headers in Project Properties.
2 * To change this template file, choose Tools | Templates
3 * and open the template in the editor.
4 */
5 package g;
6
7 /**
8 * @author LABRPL-23
9 */
10
11 public class Pesawat extends Kendaraan{
12     String maskapai = "Avtur";
13     int jumlahRoda = 6;
14     int kursi = 60;
15
16     public void info(){
17         System.out.println("Pesawat dengan maskapai " + maskapai + "\n" +
18             "Memiliki roda " + jumlahRoda + " buah roda " +
19             "\n" + "dan memiliki kursi berjumlah " + kursi + "\n" +
20             "Berbahan bakar dari " + super.bahanBakar + "\n" +
21             "dengan jumlah penggerak 6 " + super.penggerak);
22     }
23
24 }
25
```

g - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Proj... x Files Services

main.java Libraries Hewan InstanceVariable JavaApplication1 Karyawan LocalVariable loginform Mahasiswa Modul 2 Modul2.2 modul 3 nonvoid pegawai SafeParking tugas6

Source Packages tugas6 BangunDatar.java Persegi.java

Navigator x

Members

Mobil :: Kendaraan info() kursi : int merk : String

Kendaraan.java x Mobil.java x inherkendaraan.java x Pesawat.java x main.java x Tugas6.java

Output - g (run) x

```
run:
Mobil bermerk Honda
dan memiliki kursi berjumlah4
Berbahan bakar dari Bensol
dengan jumlah penggerak 1 mesin
=====
Pesawat dengan maskapai Avtur
Memiliki roda 6 buah roda
dan memiliki kursi berjumlah 60
Berbahan bakar dari Bensol
dengan jumlah penggerak 6 mesin
BUILD SUCCESSFUL (total time: 0 seconds)
```

g - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Proj... x Files Servi... Libraries main.java

Hewan InstanceVariable JavaApplication1 Karyawan LocalVariable loginform Mahasiswa Modul 2 Modul2.2 modul 3 nonvoid pegawai SafeParking tugas6

Source Packages tugas6 BangunDatar.java Persegi.java

Kendaraan.java x Mobil.java x inherkendaraan.java x Pesawat.java x main.java x Tugas6.java x

Source History

```
1  /*
2   * To change this license header, choose License Headers in Project Properties.
3   * To change this template file, choose Tools | Templates
4   * and open the template in the editor.
5   */
6 package g;
7
8 /**
9  *
10 */
11
12 public class Kendaraan {
13     String penggerak = " mesin ";
14     String bahanBakar = "Bensol";
15     int kursi = 4;
16 }
17
```

Navigator x

Members <em...>

Kendaraan

- bahanBakar : String
- kursi : int
- penggerak : String

Output - g (run) x

```
run:
Mobil bermerk Honda
dan memiliki kursi berjumlah4
Berbahan bakar dari Bensol
dengan jumlah penggerak 1 mesin
=====
Pesawat dengan maskapai Avtur
Memiliki roda 6 buah roda
dan memiliki kursi berjumlah 60
Berbahan bakar dari Bensol
dengan jumlah penggerak 6 mesin
BUILD SUCCESSFUL (total time: 0 seconds)
```

## TUGAS

The screenshot shows the NetBeans IDE interface with the following details:

- Title Bar:** tugas6 - NetBeans IDE 8.0.2
- Menu Bar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Toolbar:** Standard NetBeans icons for file operations.
- Projects Tab:** Shows a list of projects including LocalVariable, loginform, Mahasiswa, Modul 2, Modul2.2, modul 3, nonvoid, pegawai, SafeParking, and tugas6. The tugas6 project is expanded to show its source packages.
- Source Packages:** Under tugas6, there is a package named tugas6 containing the following files: Bangundatar.java, Demo.java, Persegi.java, Persegipanjang.java, Segitiga.java, Segitigasamakaki.java, Segitigasamasisi.java, and Tugas6.java.
- Navigator Tab:** Shows the members of the Bangundatar class, including methods hitungkeliling() and hitungluas(), and fields keliling and luas.
- Code Editor:** Displays the code for the Bangundatar class. The code defines a class with two double fields (luas and keliling) and two methods (hitungluas() and hitungkeliling()) that print their respective values to System.out.println.
- Output Tab:** Shows the run log with the following output:

```
run:
Luas Persegi: 25.0
Keliling Persegi: 20.0
Luas Persegi panjang: 8.0
Keliling Persegi panjang: 12.0
Luas Segitiga samakaki: 6.0
Keliling Segitiga samakaki: 14.0
Luas Segitiga samasisi: 3.0
Keliling Segitiga samasisi: 9.0
BUILD SUCCESSFUL (total time: 0 seconds)
```

tugas6 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

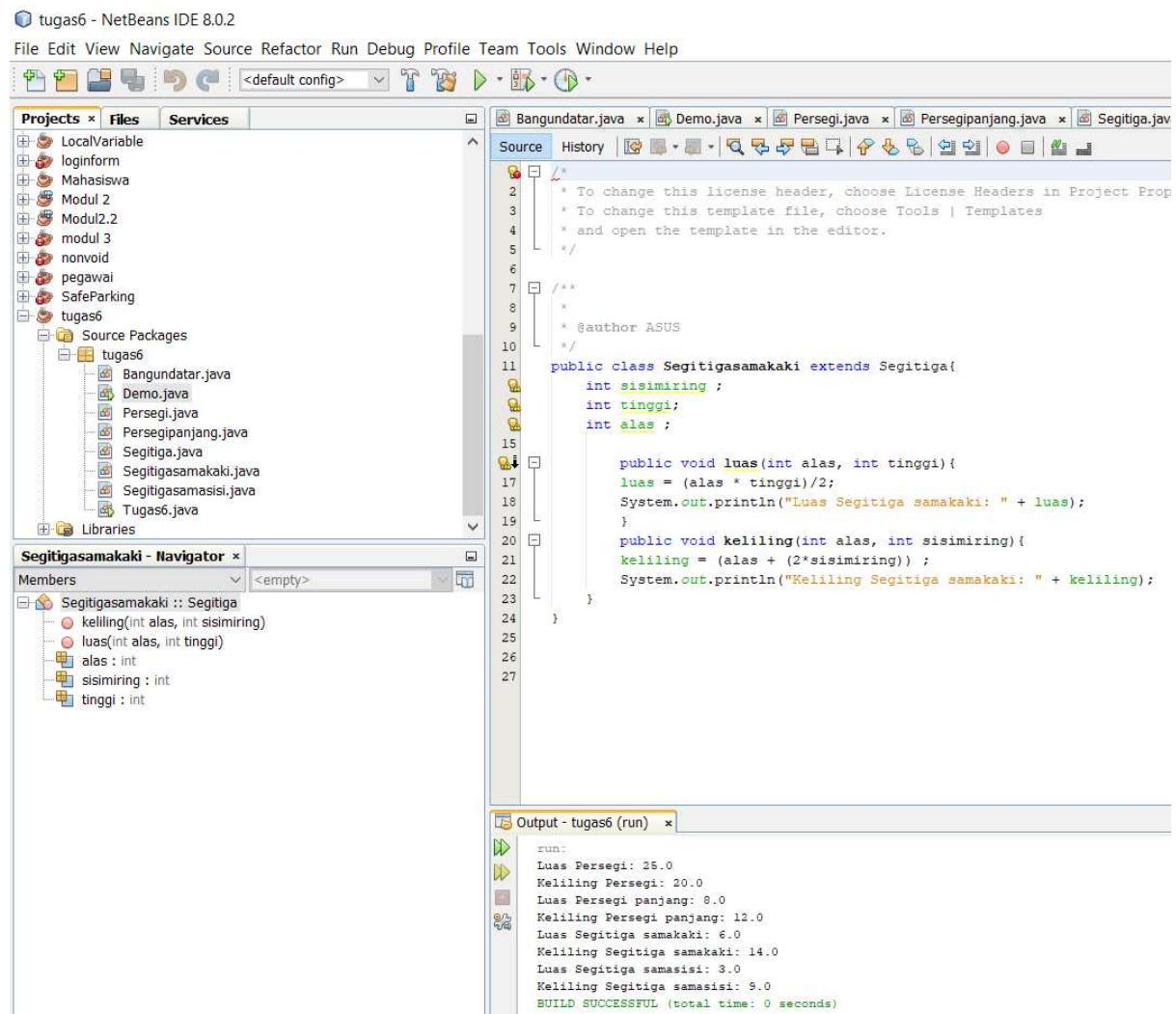
The screenshot shows the NetBeans IDE interface with the following details:

- Projects:** LocalVariable, loginform, Mahasiswa, Modul 2, Modul2.2, modul 3, nonvoid, pegawai, SafeParking, tugas6.
- tugas6:** Source Packages (tugas6) containing files: Bangundatar.java, Demo.java, Persegi.java, Persegipanjang.java, Segitiga.java, Segitigasamakali.java, Segitigasamasisi.java, Tugas6.java.
- Code Editor:** Displays the content of Segitigasamasisi.java:

```
/* To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
/*
 * @author ASUS
 */
public class Segitigasamasisi extends Segitiga{
    double sisi ;
    double tinggi;

    public void luas(int sisi, int tinggi){
        luas = (sisi * tinggi)/2;
        System.out.println("Luas Segitiga samasisi: " + luas);
    }
    public void keliling(int sisi){
        keliling = 3 * sisi ;
        System.out.println("Keliling Segitiga samasisi: " + keliling);
    }
}
```
- Navigator:** Shows the members of Segitigasamasisi::Segitiga:
  - Method: keliling(int sisi)
  - Method: luas(int sisi, int tinggi)
  - Variable: sisi : double
  - Variable: tinggi : double
- Output:** Output - tugas6 (run)

```
run:
Luas Persegi: 25.0
Keliling Persegi: 20.0
Luas Persegi panjang: 9.0
Keliling Persegi panjang: 12.0
Luas Segitiga samakaki: 6.0
Keliling Segitiga samakaki: 14.0
Luas Segitiga samasisi: 3.0
Keliling Segitiga samasisi: 9.0
BUILD SUCCESSFUL (total time: 0 seconds)
```



tugas6 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

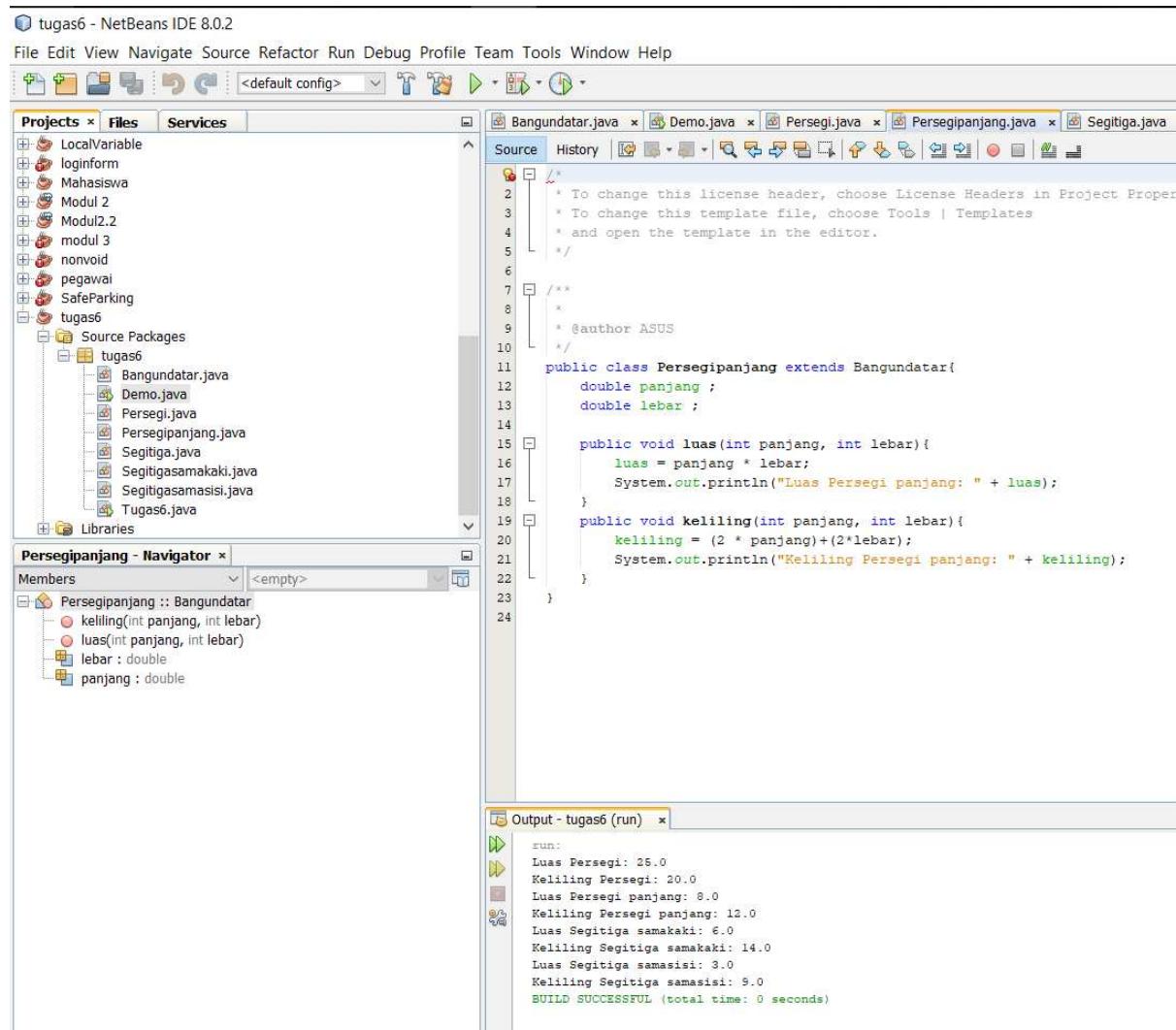
The screenshot shows the NetBeans IDE interface with the following components:

- Projects** pane: Shows various Java projects like Localvariable, loginform, Mahasiswa, Modul 2, Modul2.2, modul 3, nonvoid, pegawai, SafeParking, and tugas6. The tugas6 project is expanded, showing its source packages and files.
- Editor** pane: Displays the code for the Segitiga.java class, which extends Bangundatar. It contains methods for calculating area and perimeter of a triangle.
- Navigator** pane: Lists the members of the Segitiga class, including its constructor and three instance variables: alas, sisimiring, and tinggi.
- Output** pane: Shows the results of running the application, displaying the calculated areas and perimeters for different shapes.

```
/*
 * To change this license header, choose License Headers in Project
 * File | Properties | License Headers.
 */
/*
 * @author ASUS
 */
public class Segitiga extends Bangundatar{
    double tinggi ;
    double alas ;
    double sisimiring ;
    public void luas(int alas, int tinggi){
        luas = (alas * tinggi)/2;
        System.out.println("Luas Segitiga: " + luas);
    }
    public void keliling(int alas, int sisimiring, int tinggi){
        keliling = (alas + sisimiring + tinggi);
        System.out.println("Keliling Segitiga: " + keliling);
    }
}
```

Output - tugas6 (run) x

```
run:
Luas Persegi: 25.0
Keliling Persegi: 20.0
Luas Persegi panjang: 8.0
Keliling Persegi panjang: 12.0
Luas Segitiga samakaki: 6.0
Keliling Segitiga samakaki: 14.0
Luas Segitiga samasisi: 3.0
Keliling Segitiga samasisi: 9.0
BUILD SUCCESSFUL (total time: 0 seconds)
```



# tugas6 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

The screenshot shows the NetBeans IDE interface with the following details:

- Projects:** LocalVariable, loginform, Mahasiswa, Modul 2, Modul.2, modul 3, nonvoid, pegawai, SafeParking, tugas6.
- Source Packages:** tugas6 contains Bangundatar.java, Demo.java, Persegi.java, Persegipanjang.java, Segitiga.java, Segitigasamakaki.java, Segitigasamasisi.java, and Tugas6.java.
- Code Editor:** Displays the content of Persegi.java:

```
/* To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
/**
 *
 * @author ASUS
 */
public class Persegi extends Bangundatar{
    double sisi;
    public void luas(int sisi){
        luas = sisi*sisi;
        System.out.println("Luas Persegi: " + luas);
    }
    public void keliling(int sisi){
        keliling = 4 * sisi;
        System.out.println("Keliling Persegi: " + keliling);
    }
}
```
- Navigator:** Shows members of the Persegi class: keliling(int sisi), luas(int sisi), and sisi : double.
- Output - tugas6 (run) :** Displays the run results:

```
run:
Luas Persegi: 25.0
Keliling Persegi: 20.0
Luas Persegi panjang: 8.0
Keliling Persegi panjang: 12.0
Luas Segitiga samakaki: 6.0
Keliling Segitiga samakaki: 14.0
Luas Segitiga samasisi: 3.0
Keliling Segitiga samasisi: 9.0
BUILD SUCCESSFUL (total time: 0 seconds)
```

tugas6 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects x Files Services

LocalVariable  
loginform  
Mahasiswa  
Modul 2  
Modul2.2  
modul 3  
nonvoid  
pegawai  
SafeParking  
tugas6

Source Packages tugas6  
Bangundatar.java  
Demo.java  
Persegi.java  
Persegipanjang.java  
Segitiga.java  
Segitigasamakaki.java  
Segitigasamasisi.java  
Tugas6.java

Navigator x

Members <empty>

Demo  
main(String[] args)

Bangundatar.java

```
/*
 * To change this license header, choose License Headers
 * in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

/**
 *
 */
@Author ASUS
 */

public class Demo {
    public static void main (String[] args){
        Persegi persegi = new Persegi();
        Persegipanjang pp = new Persegipanjang();
        Segitigasamakaki samakaki = new Segitigasamakaki();
        Segitigasamasisi samasisi = new Segitigasamasisi();
        persegi.luas(5);
        persegi.keliling(5);
        pp.luas(4,2);
        pp.keliling(4,2);
        samakaki.luas(4,3);
        samakaki.keliling(4,5);
        samasisi.luas(3,2);
        samasisi.keliling(3);
    }
}
```

Output - tugas6 (run) x

```
run:
Luas Persegi: 25.0
Keliling Persegi: 20.0
Luas Persegi panjang: 8.0
Keliling Persegi panjang: 12.0
Luas Segitiga samakaki: 6.0
Keliling Segitiga samakaki: 14.0
Luas Segitiga samasisi: 3.0
Keliling Segitiga samasisi: 9.0
BUILD SUCCESSFUL (total time: 0 seconds)
```

## **PRAKTIKUM MODUL 7**

**Nama : Guntur Jatmiko**

**NIM : L200180039**

**Kelas : B**

bab7 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Services Files ...va Tugas1.java DemoRadioButton.java FrameA.java FrameB.java menu.java Bab7.java Karyawan.java KaryawanDemo.java ManagerDemo.java Manager.java

Source History ... - + Search (Ctrl+F) ...

Bab7.java

```
1 * To change this license header, choose License Headers in Project Properties.
2 * To change this template file, choose Tools | Templates
3 * and open the template in the editor.
4 */
5 package bab7;
6
7 /**
8 * Author LABRIEL-12
9 */
10 public class Bab7 {
11
12     /**
13      * @param args the command line arguments
14     */
15     public static void main(String[] args) {
16         // TODO code application logic here
17     }
18 }
```

Test Packages Libraries Test Libraries Lathan Modul12 Ongkir Overloading Overriding Overriding2

Navigator Members <empty>

Bab7 main(String[] args)

Output

bab7 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Services Files ...va Tugas1.java DemoRadioButton.java FrameA.java FrameB.java menu.java Bab7.java Karyawan.java KaryawanDemo.java ManagerDemo.java Manager.java

Source History ... - + Search (Ctrl+F) ...

Karyawan.java

```
1 * To change this license header, choose License Headers in Project Properties.
2 * To change this template file, choose Tools | Templates
3 * and open the template in the editor.
4 */
5 package bab7;
6
7 /**
8 * Author LABRIEL-12
9 */
10 public class Karyawan {
11     private String name;
12     private float gaji;
13     private int usia;
14
15     public String getName() {
16         return name;
17     }
18     public void setName(String name) {
19         this.name = name;
20     }
21     public float getGaji() {
22         return gaji;
23     }
24     public void setGaji(float gaji) {
25         this.gaji = gaji;
26     }
27     public int getUsia() {
28         return usia;
29     }
30     public void setUsia(int usia) {
31         this.usia = usia;
32     }
33 }
```

Test Packages Libraries Lathan Modul12 Ongkir Overloading Overriding Overriding2

Navigator Members <empty>

Karyawan getName():String getGaji():float setGaji(float gaji):void setUsia(int usia):void getName(String name):String gaji : float usia : int

Output

The screenshot shows the NetBeans IDE interface with the title bar "bab7 - NetBeans IDE 8.0.2". The main window displays the KaryawanDemo.java file in the editor. The code implements a KaryawanDemo class that extends Karyawan. It includes a constructor that initializes Kl (Karyawan) with name "Karyawan", age 20, and salary 10000000. The code then prints the name, age, and salary of the Karyawan object.

```
1  * To change this license header, choose License Headers in Project Properties.
2  * To change this template file, choose Tools | Templates
3  * and open the template in the editor.
4  */
5
6 package bab7;
7
8 /**
9  * Author LABRPL-12
10 */
11 public class KaryawanDemo {
12     public static void main(String[] args) {
13         Karyawan k1 = new Karyawan();
14         k1.setName("Karyawan");
15         k1.setAge(20);
16         k1.setSalary(10000000);
17         k1.setUnit(20);
18
19         System.out.println(k1.getName());
20         System.out.println(k1.getAge());
21         System.out.println(k1.getSalary());
22     }
23 }
24
```

The screenshot shows the NetBeans IDE interface with the title bar "bab7 - NetBeans IDE 8.0.2". The main window displays the Manager.java file in the editor. The code defines a Manager class that extends Karyawan. It includes fields for jamKerja (7.5 hours), gajiManager (2 times salary), kelebihan (String), and usiaManager (int). The code also includes methods to get and set these values.

```
1  * To change this license header, choose License Headers in Project Properties.
2  * To change this template file, choose Tools | Templates
3  * and open the template in the editor.
4  */
5
6 package bab7;
7
8 /**
9  * Author LABRPL-12
10 */
11 public class Manager extends Karyawan{
12     private float jamKerja = 7.5f;
13     private float gajiManager;
14     private String kelebihan ;
15     private String alumni ;
16     private int usiaManager ;
17
18     public float getJamKerja(){
19         return jamKerja;
20     }
21     public void setJamKerja(float jamKerja){
22         this.jamKerja = jamKerja;
23     }
24     public float getGajiManager(){
25         return getGaji() * 2;
26     }
27     public String getKelebihan(){
28         return kelebihan;
29     }
30     public void setKelebihan(String kelebihan){
31         this.kelebihan = kelebihan;
32     }
33     public String getAlumni(){
34         return alumni;
35     }
36     public void setAlumni(String alumni){
37         this.alumni = alumni;
38     }
39     public int getUsiaManager(){
40         return usiaManager;
41     }
42     public void setUsiaManager(int usiaManager){
43         this.usiaManager = usiaManager;
44     }
45 }
46
```

bab7 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Source History Search (Ctrl+F)

Projects Services Files ...va DemoTextField.java Tugasi.java DemoRadioButton.java FrameA.java FrameB.java menu.java Bab7.java Karyawan.java KaryawanDemo.java ManagerDemo.java

Bab7 Source Packages

- Bab7
- Karyawan.java
- KaryawanDemo.java
- Manager.java
- ManagerDemo.java

Test Packages

- Libraries
- Latin1
- Modul12
- Ongkir
- Ongkir
- Overloading
- Overloading
- Overriding2

ManagerDemo - Navigator

Members <empty>

main(String[] args)

```
21     ml.setUsiaManager(23);
22
23     System.out.println("jam kerja : " + ml.getJamKerja());
24
25     System.out.println("gaji perbulan :" + ml.getGajiManager());
26
27     System.out.println("memiliki kelebihan yaitu " + ml.getKelebihan());
28
29     System.out.println("alumni dari " + ml.getAlumni());
30
31     System.out.println("berusia :" + ml.getUsiaManager());
32
33     m2.setJamKerja(7.5f);
34
35     m2.setGaji(8000000);
36
37     m2.getGaji();
38
39     m2.setKelebihan("tidak hemat");
40
41     m2.setAlumni("UNS");
42
43     m2.setUsiaManager(24);
44
45     System.out.println("jam kerja : " + m2.getJamKerja());
46
47     System.out.println("gaji perbulan :" + m2.getGajiManager());
48
49     System.out.println("memiliki kelebihan yaitu " + m2.getKelebihan());
50
51     System.out.println("alumni dari " + m2.getAlumni());
52
53     m3.setJamKerja(7.5f);
54
55     m3.setGaji(9000000);
56
57     m3.getGaji();
58
59     m3.setKelebihan("cumlaude");
```

Output - bab7 (run-single)

```
alumni dari UNS
perusia :33
jam kerja : 7.5
gaji perbulan :8000000.0
memiliki kelebihan yaitu tidak hemat
alumni dari UNS
perusia :34
jam kerja : 7.5
gaji perbulan :9000000.0
memiliki kelebihan yaitu cumlaude
alumni dari UNS
perusia :22
jam kerja : 7.5
gaji perbulan :3000000.0
memiliki kelebihan yaitu desainer
alumni dari UNS
perusia :22
jam kerja : 7.5
gaji perbulan :3000000.0
memiliki kelebihan yaitu pro player PUBG
alumni dari UNS
perusia :22
BUILD SUCCESSFUL (total time: 1 second)
```

Output

10:21 INS

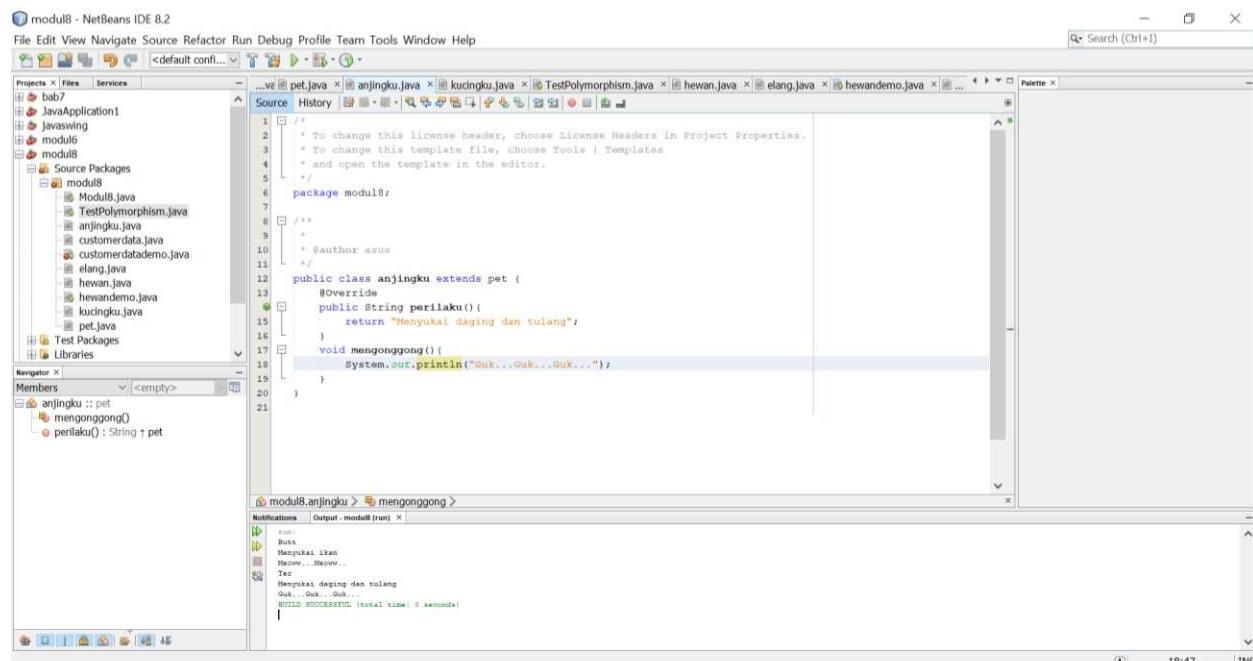
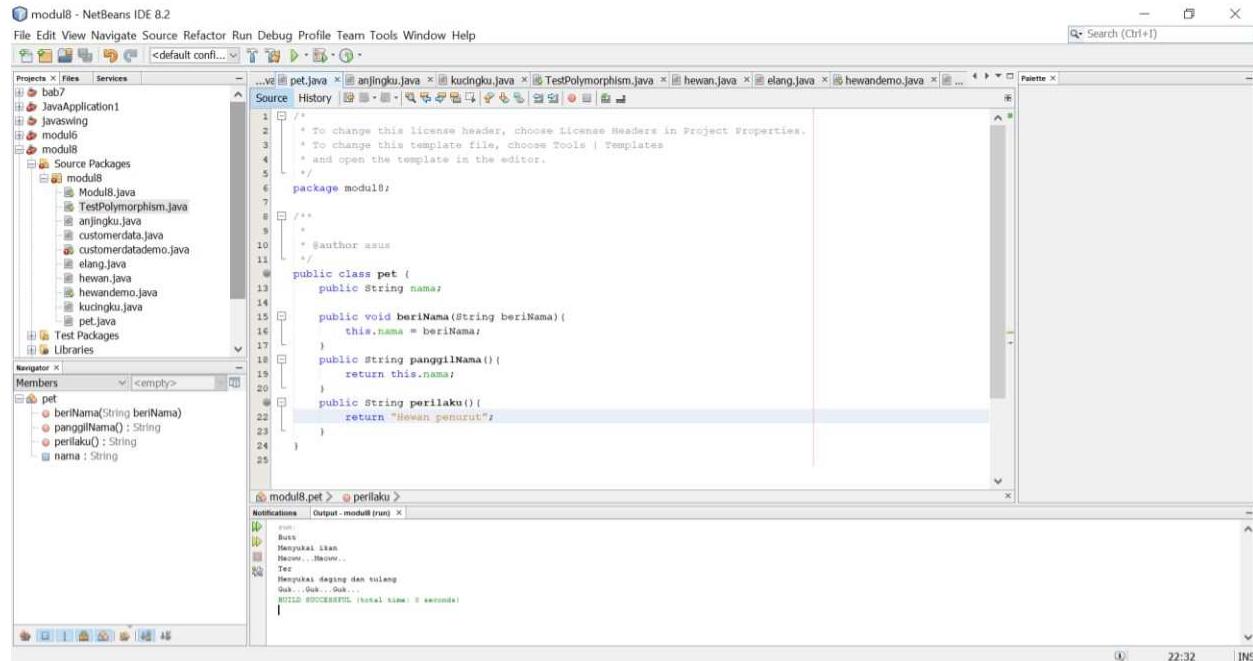
Nama : Aisyah Goevara

NIM : L200180034

Kelas : B

## Latihan dan Tugas Praktikum PBO Modul 8

## Latihan



modul8 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Source History Palettes Search (Ctrl+F)

Projects Services <default config...>

modul8

Source Packages modul8

- Modul8.java
- TestPolymorphism.java
- anjingku.java
- customerdata.java
- customerdatademo.java
- elang.java
- hewan.java
- hewandemo.java
- kucingku.java
- pet.java

Test Packages

Libraries

Navigator > Members <empty>

modul8.kucingku > Notifications Output - modul8 (run) >

```

1  /*
2   * To change this license header, choose License Headers in Project Properties.
3   * To change this template file, choose Tools | Templates.
4   * and open the template in the editor.
5   */
6 package modul8;
7
8 /**
9  *
10 * @author susus
11 */
12 public class kucingku extends pet {
13     @Override
14     public String perilaku(){
15         return "Menyukai ikan";
16     }
17     void mengong(){
18         System.out.println("Meoww...Meoww..");
19     }
20     void makan(){
21         System.out.println("Menyukai ikan");
22     }
23 }
24

```

modul8.kucingku > Notifications Output - modul8 (run) >

```

com:
Bots
Menyukai ikan
Meoww...
Ter
Menyukai daging dan tulang
Gak...Gak...
BUILD SUCCESSFUL (total time: 0 seconds)

```

12:34 INS

modul8 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Source History Palettes Search (Ctrl+F)

Projects Services <default config...>

modul8

Source Packages modul8

- Modul8.java
- TestPolymorphism.java
- anjingku.java
- customerdata.java
- customerdatademo.java
- elang.java
- hewan.java
- hewandemo.java
- kucingku.java
- pet.java

Test Packages

Libraries

Navigator > Members <empty>

modul8.TestPolymorphism > main > Notifications Output - modul8 (run) >

```

1  /*
2   * To change this license header, choose License Headers in Project Properties.
3   * To change this template file, choose Tools | Templates.
4   * and open the template in the editor.
5   */
6 package modul8;
7
8 /**
9  *
10 * @author susus
11 */
12 public class TestPolymorphism {
13     public static void main(String[] args){
14         pet aa = new pet();
15         kucingku bb = new kucingku();
16         anjingku cc = new anjingku();
17         aa.beriNama("Butt");
18         System.out.println(aa.panggilNama());
19         System.out.println(bb.perilaku());
20         bb.mengong();
21         aa.beriNama("Ter");
22         System.out.println(aa.panggilNama());
23         System.out.println(cc.perilaku());
24         cc.mengong();
25     }
26 }
27

```

modul8.TestPolymorphism > main > Notifications Output - modul8 (run) >

```

com:
Bots
Menyukai ikan
Meoww...
Ter
Menyukai daging dan tulang
Gak...Gak...
BUILD SUCCESSFUL (total time: 0 seconds)

```

25:6 INS

Tugas

1.

modul8 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Files Services <default config...>

Source History Palettes

```
1  /*
2   * To change this license header, choose License Headers in Project Properties.
3   * To change this template file, choose Tools | Templates
4   * and open the template in the editor.
5   */
6 package modul8;
7
8 /**
9  *
10 * @author asus
11 */
12 public class hewan {
13     public void jalan(){
14         System.out.println("Hewan bisa jalan");
15     }
16 }
```

modul8.hewan > jalan

Notifications Output - modul8 (run) x

```
run Jalan dengan gagah
Modul8 bisa jalan
BUILD SUCCESSFUL (total time: 0 seconds)
```

14:45 INS

modul8 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Files Services <default config...>

Source History Palettes

```
1  /*
2   * To change this license header, choose License Headers in Project Properties.
3   * To change this template file, choose Tools | Templates
4   * and open the template in the editor.
5   */
6 package modul8;
7
8 /**
9  *
10 * @author asus
11 */
12 public class elang extends hewan {
13     public void jalan(){
14         System.out.println("Jalan dengan gagah");
15     }
16 }
```

modul8.elang > jalan

Notifications Output - modul8 (run) x

```
run Jalan dengan gagah
Modul8 bisa jalan
BUILD SUCCESSFUL (total time: 0 seconds)
```

14:47 INS

The screenshot shows the NetBeans IDE interface with the following details:

- Title Bar:** modul8 - NetBeans IDE 8.2
- Menu Bar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Toolbar:** Standard NetBeans toolbar with icons for file operations.
- Project Explorer:** Shows projects bab7, JavaApplication1, Javawing, modul6, modul8, and Source Packages. modul8 contains Modul8.java, TestPolymorphism.java, anjingku.java, customerdata.java, customerdatademo.java, elang.java, hewan.java, hewandemo.java, kucingku.java, pet.java, and petdemo.java.
- Code Editor:** The main editor window displays the content of TestPolymorphism.java and hewandemo.java. The code for hewandemo.java is as follows:

```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6 package modul8;
7
8 /**
9  * @author asus
10 */
11
12 public class hewandemo {
13     public static void main(String[] args) {
14         hewan hi = new hewan();
15         elang ei = new elang();
16         ei.jalan();
17         hi.jalan();
18     }
19 }

```

- Output Window:** Shows the build output for modul8.hewandemo > main > Notifications and Output - modul8 (run). The output is:

```
Running modul8.hewandemo
Bevan jalan
Bevan bisa jalan
BUILD SUCCESSFUL (total time: 0 seconds)
```
- Bottom Status Bar:** Shows the current time as 17:19 and the word INS.

2. membuat class customer data

The screenshot shows the NetBeans IDE interface with the title "modul8 - NetBeans IDE 8.2". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has icons for New Project, Open Project, Save, Undo, Redo, Cut, Copy, Paste, Find, Replace, and Run.

The Projects tab shows the following structure:

- bab7
- JavaApplication1
- Javawing
- modules
- modul8
- Source Packages
  - modul8
    - Modul8.java
    - TestPolymorphism.java
    - anjingku.java
    - customerdata.java
    - customerdatademo.java
    - elang.java
    - hewan.java
    - hewandemo.java
    - kucingku.java
    - pet.java
  - Test Packages
  - Libraries

The Navigator tab shows Members: customerdatademo and main(String[] args).

The Editor tab displays the code for customerdata.java:

```
5
6 package modul8;
7
8 /**
9 * @author susu
10 */
11 public class customerdata {
12     String nama;
13     String alamat;
14     int tglahir;
15     String pekerjaan;
16     int gaji;
17
18     public void overloading(String nama, String alamat,
19         int tglahir, String pekerjaan, int gaji){
20         this.nama = nama;
21         this.alamat = alamat;
22         this.tglahir = tglahir;
23         this.pekerjaan = pekerjaan;
24         this.gaji = gaji;
25
26         System.out.println("nama: " + nama + "\nalamat: " + alamat + "\ntglahir: " + tglahir
27             + "\npekerjaan: " + pekerjaan + "\ngaji: " + gaji);
28     }
29 }
30
```

The Notifications tab shows the output of the run command:

```
customerdatademo.java:41:
  1.  public void overloading(String nama, String alamat, int tglahir, String pekerjaan, int gaji) {
  2.     this.nama = nama;
  3.     this.alamat = alamat;
  4.     this.tglahir = tglahir;
  5.     this.pekerjaan = pekerjaan;
  6.     this.gaji = gaji;
  7.
  8.     System.out.println("nama: " + nama + "\nalamat: " + alamat + "\ntglahir: " + tglahir
  9.                     + "\npekerjaan: " + pekerjaan + "\ngaji: " + gaji);
 10.
 11. }
 12.
 13. public static void main(String[] args) {
 14.     customerdata demo = new customerdata();
 15.     demo.overloading("susu", "Jl. Pahlawan", 1995, "Peternak", 2000000);
 16. }
 17.
 18. }

Customerdatademo.main()
 1.  public static void main(String[] args) {
 2.     customerdata demo = new customerdata();
 3.     demo.overloading("susu", "Jl. Pahlawan", 1995, "Peternak", 2000000);
 4. }
 5.
 6. Customerdatademo.main()
 7. Customerdatademo.main()
 8. Customerdatademo.main()
 9. Customerdatademo.main()
 10. Customerdatademo.main()
 11. Customerdatademo.main()
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 300. Customerdatademo.main()
```

3. membuat class main

modul8 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

<default config>

Projects Files Services

Source History

```

11 b
12 public class customerdatademo {
13     public static void main(String[] args) {
14         customerdata dd = new customerdata();
15         dd.overloading("vara", "surakarta", 10, "pengusaha", 5000000);
16
17         customerdata ee = new customerdata();
18         ee.overloading("go", "surakarta", 05, "pns", 2500000);
19
20         customerdata ff = new customerdata();
21         ff.overloading("gce", "surakarta", 01, "dokter", 3000000);
22
23         customerdata gg = new customerdata();
24         gg.overloading("gcev", "surakarta", 02, "pegawai", 2000000);
25
26         customerdata hh = new customerdata();
27         hh.overloading("ais", "surakarta", 03, "pns", 2500000);
28
29         customerdata ii = new customerdata();
30         ii.overloading("aisy", "surakarta", 04, "pengusaha", 3000000);
31
32         customerdata jj = new customerdata();
33         jj.overloading("aisyah", "surakarta", 05, "dokter", 4000000);
34
35         customerdata kk = new customerdata();
36         kk.overloading("var", "surakarta", 06, "pegawai", 1500000);
37
38
39
40
41
42
43
44

```

modul8.customerdatademo > main >

Notifications Output modul8 (run)

```

1. customerdatademo.java:42:
    thillahir: 1
    petugas: dokter
    gaji: 3000000
    nama: qwe
    alamat: surakarta
    usia: 30
    pekerjaan: pegawai
    gaji: 2000000
    nama: ais
    alamat: surakarta
    thillahir: 2

```

43.7 INS

modul8 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

<default config>

Projects Files Services

Source History

```

20
21         customerdata ff = new customerdata();
22         ff.overloading("gce", "surakarta", 01, "dokter", 3000000);
23
24         customerdata gg = new customerdata();
25         gg.overloading("gcev", "surakarta", 02, "pegawai", 2000000);
26
27         customerdata hh = new customerdata();
28         hh.overloading("ais", "surakarta", 03, "pns", 2500000);
29
30         customerdata ii = new customerdata();
31         ii.overloading("aisy", "surakarta", 04, "pengusaha", 3000000);
32
33         customerdata jj = new customerdata();
34         jj.overloading("aisyah", "surakarta", 05, "dokter", 4000000);
35
36         customerdata kk = new customerdata();
37         kk.overloading("var", "surakarta", 06, "pegawai", 1500000);
38
39         customerdata ll = new customerdata();
40         ll.overloading("rs", "surakarta", 07, "pns", 2000000);
41
42         customerdata mm = new customerdata();
43         mm.overloading("sy", "surakarta", 10, "pengusaha", 4500000);
44

```

modul8.customerdatademo > main >

Notifications Output modul8 (run)

```

1. customerdatademo.java:42:
    thillahir: 1
    petugas: dokter
    gaji: 3000000
    nama: qwe
    alamat: surakarta
    usia: 30
    pekerjaan: pegawai
    gaji: 2000000
    nama: ais
    alamat: surakarta
    thillahir: 2

```

42:45 INS

Hasilnya

modul8 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

<default config>

Projects Files Services

Source History modul8.customerdatademo > main >

Notifications Output - modul8 (run) >

modul8 Source Packages modul8

- Modul8.java
- TestPolymorphism.java
- anjingku.java
- customerdata.java
- customerdatademo.java
- elang.java
- hewan.java
- hewandemo.java
- kucingku.java
- pet.java

Test Packages Libraries

Navigator Members <empty>

customerdatademo

- main(String[] args)

name: vas  
alamat: surakarta  
telp/hp: 10  
pekerjaan: pengusaha  
gaji: 5000000  
name: go  
alamat: surakarta  
telp/hp: 1  
pekerjaan: dokter  
gaji: 3000000  
name: ay  
alamat: surakarta  
telp/hp: 2  
pekerjaan: pegawai  
gaji: 1000000  
name: aks  
alamat: surakarta  
telp/hp: 3  
pekerjaan: dokter  
gaji: 3000000  
name: vcs  
alamat: surakarta  
telp/hp: 4  
pekerjaan: pengusaha  
gaji: 3000000  
name: gme  
alamat: surakarta  
telp/hp: 5  
pekerjaan: pegawai  
gaji: 1500000  
name: rx  
alamat: surakarta  
telp/hp: 6  
pekerjaan: petani  
gaji: 2000000  
name: ky  
alamat: surakarta  
telp/hp: 7  
pekerjaan: petani  
gaji: 2000000  
name: ay  
alamat: surakarta  
telp/hp: 8  
pekerjaan: pegawai  
gaji: 2500000  
name: aisy  
alamat: surakarta  
telp/hp: 9  
pekerjaan: pengusaha  
gaji: 3000000  
name: alayn  
alamat: surakarta  
telp/hp: 10  
pekerjaan: dokter  
gaji: 3000000  
name: vry  
alamat: surakarta  
telp/hp: 11  
pekerjaan: pegawai  
gaji: 1500000  
name: rx  
alamat: surakarta  
telp/hp: 12  
pekerjaan: pengusaha  
gaji: 4000000

BUILD SUCCESSFUL (total time: 0 seconds)

42:45

modul8 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

<default config>

Projects Files Services

Source History modul8.customerdatademo > main >

Notifications Output - modul8 (run) >

modul8 Source Packages modul8

- Modul8.java
- TestPolymorphism.java
- anjingku.java
- customerdata.java
- customerdatademo.java
- elang.java
- hewan.java
- hewandemo.java
- kucingku.java
- pet.java

Test Packages Libraries

Navigator Members <empty>

customerdatademo

- main(String[] args)

name: go  
alamat: surakarta  
telp/hp: 1  
pekerjaan: petani  
gaji: 2500000  
name: gme  
alamat: surakarta  
telp/hp: 2  
pekerjaan: pegawai  
gaji: 1000000  
name: aks  
alamat: surakarta  
telp/hp: 3  
pekerjaan: dokter  
gaji: 3000000  
name: vcs  
alamat: surakarta  
telp/hp: 4  
pekerjaan: pengusaha  
gaji: 3000000  
name: gme  
alamat: surakarta  
telp/hp: 5  
pekerjaan: pegawai  
gaji: 1500000  
name: rx  
alamat: surakarta  
telp/hp: 6  
pekerjaan: petani  
gaji: 2000000  
name: ky  
alamat: surakarta  
telp/hp: 7  
pekerjaan: pegawai  
gaji: 1500000  
name: ay  
alamat: surakarta  
telp/hp: 8  
pekerjaan: pengusaha  
gaji: 3000000  
name: alayn  
alamat: surakarta  
telp/hp: 9  
pekerjaan: dokter  
gaji: 3000000  
name: vry  
alamat: surakarta  
telp/hp: 10  
pekerjaan: pengusaha  
gaji: 4000000

BUILD SUCCESSFUL (total time: 0 seconds)

42:45

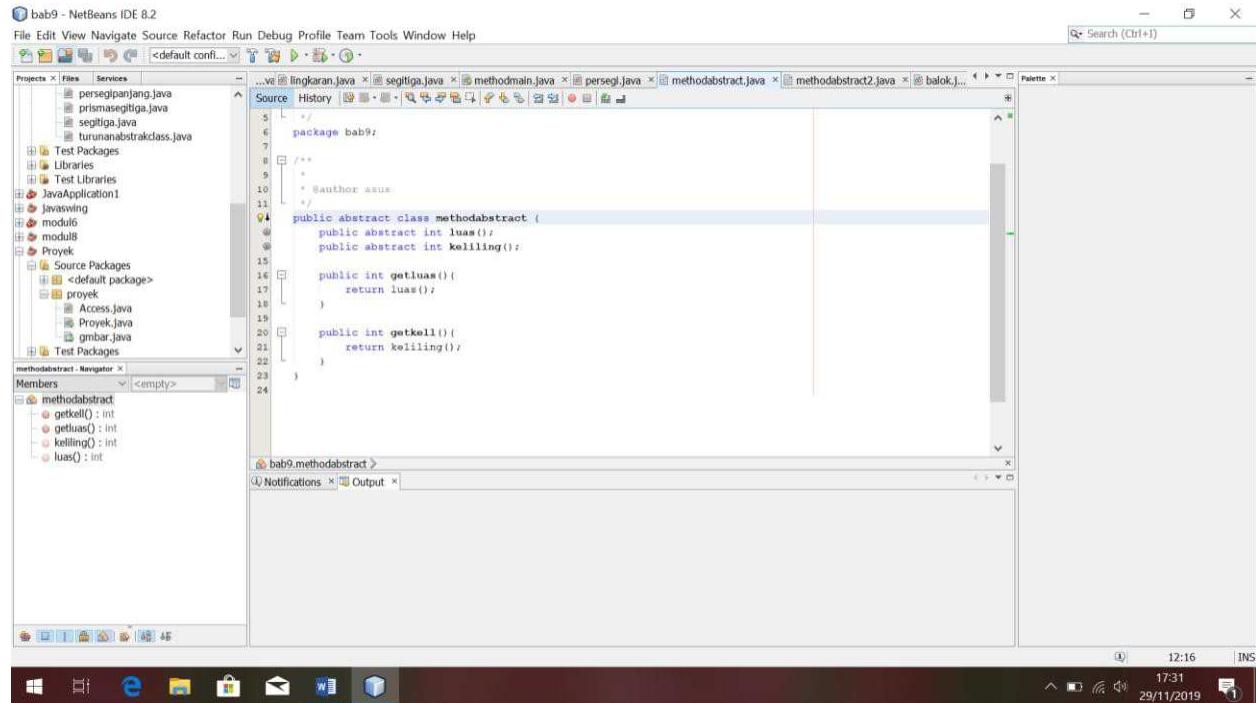
Nama : Aisyah Goevara

NIM : L200180034

Kelas : B

## Laporan Praktikum PBO Modul 9

### Latihan



The screenshot shows the NetBeans IDE interface with the following details:

- Title Bar:** bab9 - NetBeans IDE 8.2
- Menu Bar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Toolbar:** Standard NetBeans toolbar with icons for file operations.
- Project Explorer:** Shows a Java application project named "bab9" containing several source files: persegiPanjang.java, prismaSegitiga.java, segitiga.java, and turunanAbstrakDass.java. It also lists Test Packages, Libraries, and Test Libraries.
- Source Editor:** Displays the code for the abstract class `methodabstract`. The code is as follows:5 /\*
6 \*/
7 package bab9;
8
9 /\*\*
10 \* @author asus
11 \*/
12 public abstract class methodabstract {
13 public abstract int luas();
14 public abstract int keliling();
15 public int getluas(){
16 return luas();
17 }
18 public int getkeliling(){
19 return keliling();
20 }
21 }
22
23 }
- Navigator:** Shows the members of the `methodabstract` class, which include four abstract methods: `getkeliling()`, `getluas()`, `keliling()`, and `luas()`.
- Output:** Shows the output of the build process.
- System Tray:** Shows the Windows taskbar with icons for Start, Task View, File Explorer, Mail, and File Explorer. The date and time are 29/11/2019 12:16.

bab9 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Files Services

...W objekabstrakclass.java turunanabstrakclass.java persegiapanjang.java jaajaranjang.java lingkaran.java segitiga.java...

Source History

Search (Ctrl+F)

persegiapanjang - Navigator

Members <empty>

persegiapanjang :: methodabstract

- kelling() : int
- luas() : int
- lebar : int
- panjang : int

Source

```
1 /* To change this license header, choose License Headers in Project Properties.
2 * To change this template file, choose Tools | Templates
3 * and open the template in the editor.
4 */
5 package bab9;
6
7 /**
8 *
9 * @author assus
10 */
11
12 public class persegiapanjang extends methodabstract {
13     int panjang = 3;
14     int lebar = 5;
15
16     public int luas(){
17         return panjang * lebar;
18     }
19
20     public int kelling(){
21         return 2 * (panjang + lebar);
22     }
23 }
24
```

bab9.persegiapanjang >

Notifications Output

12:28 29/11/2019

bab9 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Files Services

...W objekabstrakclass.java turunanabstrakclass.java persegiapanjang.java jaajaranjang.java lingkaran.java segitiga.java...

Source History

Search (Ctrl+F)

jaajaranjang - Navigator

Members <empty>

jaajaranjang :: methodabstract

- kelling() : int
- luas() : int
- b : int
- t : int

Source

```
1 /* To change this license header, choose License Headers in Project Properties.
2 * To change this template file, choose Tools | Templates
3 * and open the template in the editor.
4 */
5 package bab9;
6
7 /**
8 *
9 * @author assus
10 */
11
12 public class jaajaranjang extends methodabstract {
13     int a = 3;
14     int b = 5;
15     int t = 8;
16
17     public int luas(){
18         return a * t;
19     }
20
21     public int kelling(){
22         return 2 * (a+b);
23     }
24 }
25
```

bab9.jaajaranjang >

Notifications Output

12:49 29/11/2019

bab9 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Files Services

...W objekabstrakclass.java turunanabstrakclass.java persegiapanjang.java Jajargenjang.java lingkaran.java segitiga.java

Source History

1 /\* To change this license header, choose License Headers in Project Properties.

2 \* To change this template file, choose Tools | Templates.

3 \* and open the template in the editor.

4 \*/

5 package bab9;

6

7 /\*\*

8 \*

9 \* @author asus

10 \*/

11 public class lingkaran extends methodabstract {

12 int r = 20;

13 double phi = 3.14f;

14

15 public int luas(){

16 return (int) (phi \* r \* r);

17 }

18

19 public int keliling(){

20 return (int) (2 \* phi \* r);

21 }

22

23 }

24

bab9.lingkaran >

Notifications Output

12:46 29/11/2019

bab9 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Files Services

...W turunanabstrakclass.java persegiapanjang.java Jajargenjang.java lingkaran.java segitiga.java methodmain.java

Source History

1 /\* To change this license header, choose License Headers in Project Properties.

2 \* To change this template file, choose Tools | Templates.

3 \* and open the template in the editor.

4 \*/

5 package bab9;

6

7 /\*\*

8 \*

9 \* @author asus

10 \*/

11 public class segitiga extends methodabstract {

12 int a = 3;

13 int b = 5;

14 int c = 4;

15 int t = 7;

16 double stgh = 0.5f;

17

18 public int luas(){

19 return (int) (stgh \* a \* t);

20 }

21

22 public int keliling(){

23 return a + b + c;

24 }

25

26 }

27

bab9.segitiga >

Notifications Output

12:45 29/11/2019

bab9 - NetBeans IDE 8.2

```

1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates.
4  * and open the template in the editor.
5  */
6  package bab9;
7
8  /**
9  *
10 * @author asus
11 */
12 public class persegi extends methodabstract{
13     int sisi = 5;
14
15     public int luas(){
16         return sisi*sisi;
17     }
18
19     public int keliling(){
20         return 4*sisi;
21     }
22 }

```

bab9.persegi >

Notifications > Output >

17:31 29/11/2019

bab9 - NetBeans IDE 8.2

```

1  package bab9;
2
3  /**
4  *
5  * @author pr
6  */
7  public class methodmain {
8      public static void main(String[] args){
9          persegi pr = new persegi();
10         System.out.println("Kelliling persegi : " + pr.getkell());
11         System.out.println("Luas persegi : " + pr.getluas());
12         persegipanjang pp = new persegipanjang();
13         System.out.println("Kelliling persegipanjang : " + pp.getkell());
14         System.out.println("Luas persegipanjang : " + pp.getluas());
15         jajargenjang jj = new jajargenjang();
16         System.out.println("Kelliling jajargenjang : " + jj.getkell());
17         System.out.println("Luas jajargenjang : " + jj.getluas());
18         lingkaran lk = new lingkaran();
19         System.out.println("Kelliling lingkaran : " + lk.getkell());
20         System.out.println("Luas lingkaran : " + lk.getluas());
21         segitiga sg = new segitiga();
22         System.out.println("Kelliling segitiga : " + sg.getkell());
23         System.out.println("Luas segitiga : " + sg.getluas());
24     }
25 }

```

bab9.methodmain > main > pp >

Notifications > Output >

17:32 29/11/2019

Hasil output

bab9 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects JavaApplication1

Source History

```

6 package bab9;
7
8 /**
9 * @author ASUS
10 */
11
12 public class methodmain {
13     public static void main(String[] args) {
14         persegi pr = new persegi();
15         System.out.println("Luas persegi : " + pr.getluas());
16         persegiipanjang pp = new persegiipanjang();
17         System.out.println("Luas persegi panjang : " + pp.getluas());
18         System.out.println("Luas persegi panjang : " + pp.getkelir());
19         jajargenjang jj = new jajargenjang();
20         System.out.println("Luas jajargenjang : " + jj.getluas());
21         System.out.println("Luas jajargenjang : " + jj.getkelir());
22     }
23 }
```

Navigator Members

Members

JavaApplication1

Output - bab9 (run)

```

Calling persegi : 20
Luas persegi : 20
Calling persegiipanjang : 14
Luas persegiipanjang : 14
Luas jajargenjang : 14
Luas jajargenjang : 14
Calling lingkaran :
Luas lingkaran : 1256
Luas lingkaran : 1256
Calling persegi : 12
Luas persegi : 12
BUILD SUCCESSFUL (total time: 0 seconds)

```

17:33 29/11/2019

## Tugas

bab9 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects JavaApplication1

Source History

```

1 * To change this license header, choose License Headers in Project Properties.
2 * To change this template file, choose Tools | Templates
3 * and open the template in the editor.
4
5 package bab9;
6
7 /**
8 * @author ASUS
9 */
10
11 public abstract class methodabstract {
12     public abstract int volume();
13     public abstract int luaspermukaan();
14
15     public int getvolume() {
16         return volume();
17     }
18
19     public int getluaspermukaan() {
20         return luaspermukaan();
21     }
22 }
23 }
```

getluaspermukaan - Navigator Members

Members

methodabstract2

- getluaspermukaan() : int
- getvolume() : int
- luaspermukaan() : int
- volume() : int

Output - bab9 (run)

```

Volume balok : 24
Luas permukaan balok : 82
volume Kubus : 216
Luaspermukaan Kubus : 216
Volume bola : 4106
Luaspermukaan bola : 1256
Volume kerucut : 87
Volume kerucut : 87
Volume prismsegitiga : 60
Luaspermukaan prismsegitiga : 52
BUILD SUCCESSFUL (total time: 0 seconds)

```

17:34 29/11/2019

bab9 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects JavaApplication1

Files Services

Source History

...ve methodabstrakt2.java balok.java kubus.java bola.java kerucut.java methodmain2.java prismasegitiga.java

Projects X Files Services

bola.java jajargenjang.java kerucut.java kubus.java lingkaran.java methodabstrakt.java methodabstrakt2.java methodmain.java methodmain2.java objekabstrakclass.java persegi.java persegiapanjang.java prismasegitiga.java segitiga.java turunanabstrakclass.java

Test Packages Libraries Test Libraries

JavaApplication1

Navigators Members <empty>

Members

balok :: methodabstrakt2

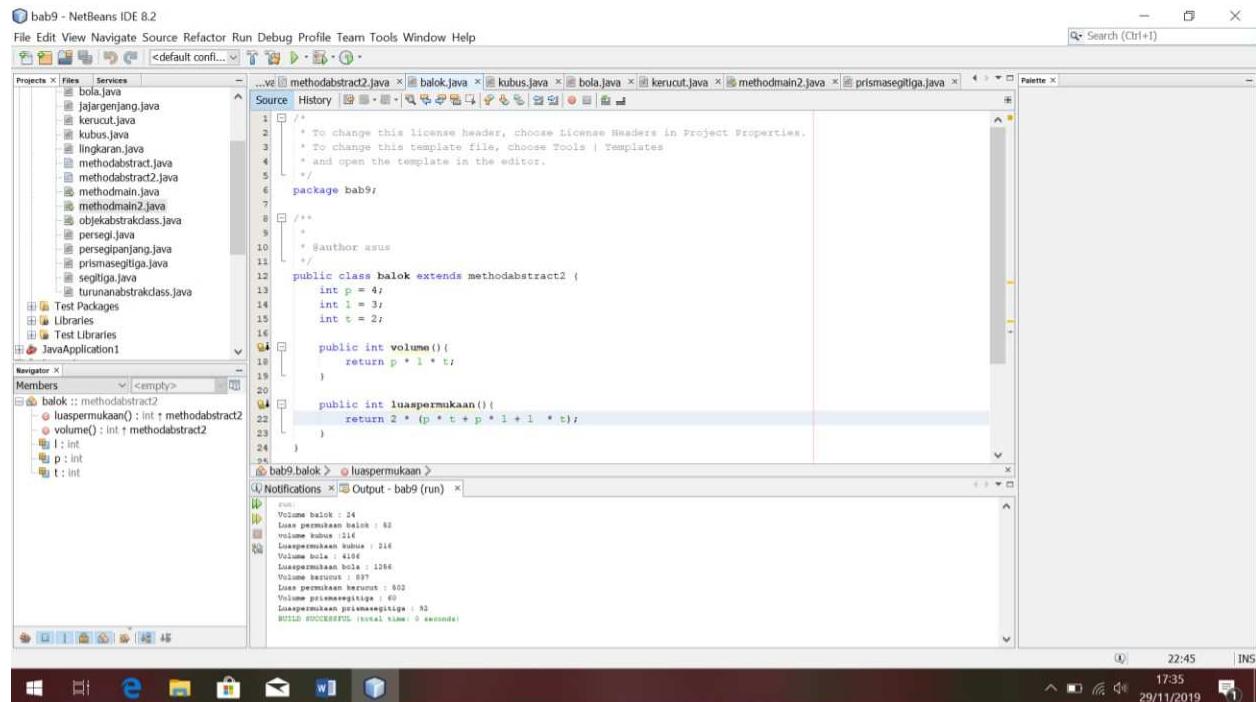
- luaspermukaan() : int ; methodabstrakt2
- volume() : int ; methodabstrakt2
- l : int
- p : int
- t : int

bat9.balok > luaspermukaan >

Notifications Output - bab9 (run) x

```
Volume balok : 24
Luas permukaan balok : 82
Volume Kubus : 114
Luas permukaan Kubus : 216
Volume bola : 4198
Luaspermukaan bola : 1256
Volume kerucut : 87
Luas permukaan kerucut : 402
Volume prismasegitiga : 60
Luaspermukaan prismasegitiga : 92
BUILD SUCCESSFUL (total time: 0 seconds)
```

22:45 29/11/2019



bab9 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects JavaApplication1

Files Services

Source History

...ve methodabstrakt2.java balok.java kubus.java bola.java kerucut.java methodmain2.java prismasegitiga.java

Projects X Files Services

bola.java jajargenjang.java kerucut.java kubus.java lingkaran.java methodabstrakt.java methodabstrakt2.java methodmain.java methodmain2.java objekabstrakclass.java persegi.java persegiapanjang.java prismasegitiga.java segitiga.java turunanabstrakclass.java

Test Packages Libraries Test Libraries

JavaApplication1

Navigators Members <empty>

Members

kubus :: methodabstrakt2

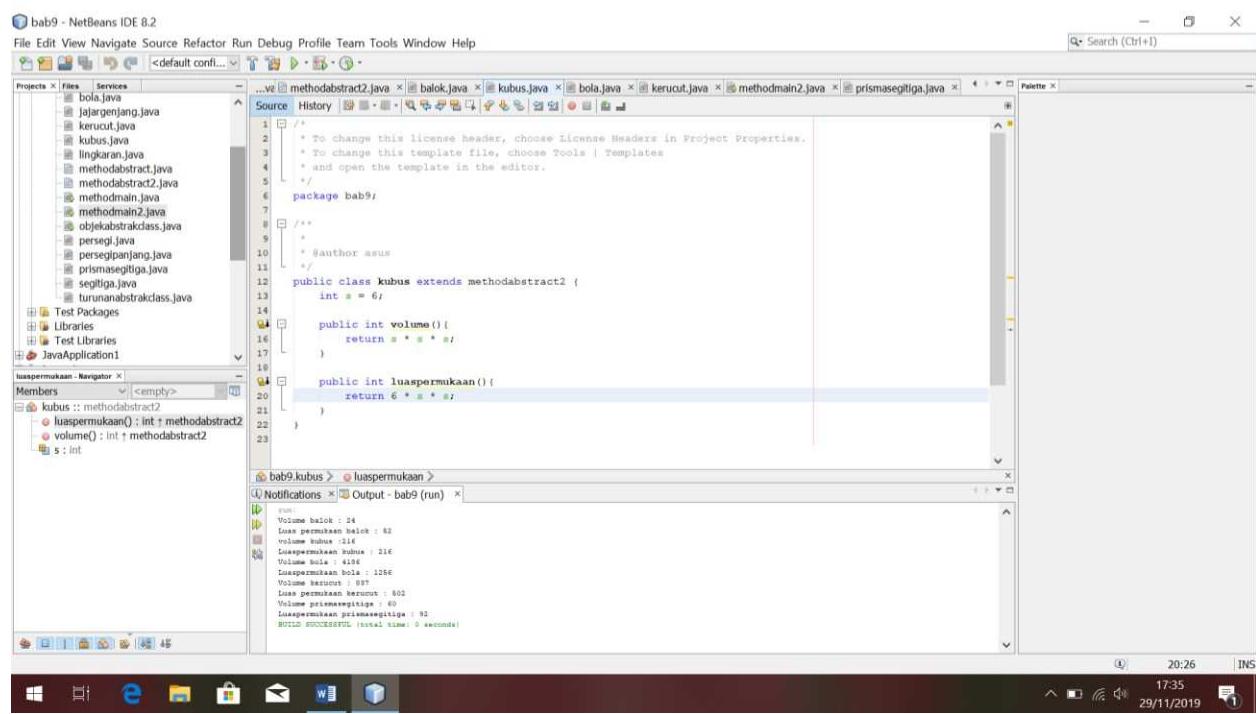
- luaspermukaan() : int ; methodabstrakt2
- volume() : int ; methodabstrakt2
- s : int

bab9.kubus > luaspermukaan >

Notifications Output - bab9 (run) x

```
Volume balok : 24
Luas permukaan balok : 82
Volume Kubus : 114
Luas permukaan Kubus : 216
Volume bola : 4198
Luaspermukaan bola : 1256
Volume kerucut : 87
Luas permukaan kerucut : 402
Volume prismasegitiga : 60
Luaspermukaan prismasegitiga : 92
BUILD SUCCESSFUL (total time: 0 seconds)
```

20:26 29/11/2019



bab9 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects JavaApplication1

Files Services

bola.java  
jajargenjang.java  
kerucut.java  
kubus.java  
lingkaran.java  
methodabstrak.java  
methodabstrak2.java  
methodmain.java  
methodmain2.java  
objekabstrakclass.java  
persegi.java  
persegiapanjang.java  
prismasegitiga.java  
segitiga.java  
turunanabstrakclass.java

Test Packages Libraries Test Libraries

luaspermukaan Navigator Members

bola :: methodabstrak2  
luaspermukaan() : int ; methodabstrak2  
volume() : int ; methodabstrak2  
empatper tiga : double  
phi : double  
r : int

Source History

```
1 /* To change this license header, choose License Headers in Project Properties.
2 * To change this template file, choose Tools | Templates
3 * and open the template in the editor.
4 */
5 package bab9;
6
7 /**
8 * @author asus
9 */
10 public class bola extends methodabstrak2{
11     int r = 10;
12     double phi = 3.14f;
13     double empatper tiga = 1.3333f;
14
15     public int volume(){
16         return (int) (empatper tiga * phi * r * r * r);
17     }
18
19     public int luaspermukaan(){
20         return (int) ( 4 * phi * r * r );
21     }
22 }
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bab9 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects > JavaApplication1 > Files > Services > Source > History > <default config...> > ...< > methodabstract2.java < > balok.java < > kubus.java < > bola.java < > kerucut.java < > methodmain2.java < > prismasegitiga.java < > < > < >

```
public class methodmain2 {
    public static void main(String[] args) {
        balok bk = new balok();
        System.out.println("Volume balok : " + bk.getvolume());
        System.out.println("Luas permukaan balok : " + bk.getluaspermukaan());
        kubus ks = new kubus();
        System.out.println("Volume kubus : " + ks.getvolume());
        System.out.println("Luas permukaan kubus : " + ks.getluaspermukaan());
        bola bl = new bola();
        System.out.println("Volume bola : " + bl.getvolume());
        System.out.println("Luas permukaan bola : " + bl.getluaspermukaan());
        kerucut kc = new kerucut();
        System.out.println("Volume kerucut : " + kc.getvolume());
        System.out.println("Luas permukaan kerucut : " + kc.getluaspermukaan());
        prismasegitiga ps = new prismasegitiga();
        System.out.println("Volume prismasegitiga : " + ps.getvolume());
        System.out.println("Luas permukaan prismasegitiga : " + ps.getluaspermukaan());
    }
}
```

bab9.methodmain2 > main > Notifications > Output - bab9 (run) >

```
Volume balok : 24
Luas permukaan balok : 82
Volume kubus : 216
Luas permukaan kubus : 216
Volume bola : 4196
Luaspermukaan bola : 1296
Volume kerucut : 977
Luaspermukaan kerucut : 502
Volume prismasegitiga : 40
Luaspermukaan prismasegitiga : 92
BUILD SUCCESSFUL (total time: 0 seconds)
```

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## Hasil output

bab9 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects > JavaApplication1 > Files > Services > Source > History > <default config...> > ...< > methodabstract2.java < > balok.java < > kubus.java < > bola.java < > kerucut.java < > methodmain2.java < > prismasegitiga.java < > < > < >

```
public class methodmain2 {
    public static void main(String[] args) {
        balok bk = new balok();
        System.out.println("Volume balok : " + bk.getvolume());
        System.out.println("Luas permukaan balok : " + bk.getluaspermukaan());
        kubus ks = new kubus();
        System.out.println("Volume kubus : " + ks.getvolume());
        System.out.println("Luas permukaan kubus : " + ks.getluaspermukaan());
    }
}
```

bab9.methodmain2 > main > Notifications > Output - bab9 (run) >

```
Volume balok : 24
Luas permukaan balok : 82
Volume kubus : 216
Luas permukaan kubus : 216
Volume bola : 4196
Luaspermukaan bola : 1296
Volume kerucut : 977
Luaspermukaan kerucut : 502
Volume prismasegitiga : 40
Luaspermukaan prismasegitiga : 92
BUILD SUCCESSFUL (total time: 0 seconds)
```

28:85 17:37 29/11/2019

Nama : Aisyah Goevara

NIM : L200180034

Kelas : B

## Tugas Modul 10 Prak.PBO

Modul10 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Services

Source History

ActivityLampu.java

```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates.
4  * and open the template in the editor.
5  */
6
7  /**
8  * 
9  * @author ASUS_White
10 */
11
12 public interface ActivityLampu {
13     public static final int LAMPU_HIDUP=1;
14     public static final int LAMPU_MATI=0;
15     public static final int LAMPU_REDUP=2;
16     public abstract void matikanLampu();
17     public abstract void hidupkanLampu();
18     public abstract void redupkanLampu();
19 }
```

Members

ActivityLampu :: none

- hidupkanLampu()
- matikanLampu()
- redupkanLampu()
- LAMPU\_HIDUP : int
- LAMPU\_MATI : int
- LAMPU\_REDUP : int

Output

Modul10 (run) x Modul10 (run) #2 x

```
1 Status Lampu = 0
2
3 0 untuk menyalaikan lampu
4 0 untuk mematikan lampu
5 2 untuk meredupkan lampu
6
7 Lampu sudah dalam kondisi redup
8
9 BUILD SUCCESSFUL (total time: 5 seconds)
```

Modul10 (run) running... 1 more... 17:42 INS

Modul10 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Services

Source History

AplikasiLampu.java

```
5  /*
6  * To change this license header, choose License Headers in Project Properties.
7  * To change this template file, choose Tools | Templates.
8  * and open the template in the editor.
9  */
10
11 /**
12  * 
13  * @author ASUS_White
14  */
15
16 public class AplikasiLampu {
17     public static void main(String[] args) {
18         Lampu lampu = new Lampu();
19         Scanner sc = new Scanner(System.in);
20         lampu.setStatusLampu(lampu.setSaklar(0));
21         System.out.println("status Lampu = "+lampu.getStatusLampu());
22         System.out.println("1 untuk menyalaikan lampu\n0 untuk mematikan lampu\n2 untuk meredupkan lampu");
23
24         int a = sc.nextInt();
25         if(lampu.setSaklar(a)==0){
26             lampu.matikanLampu();
27         }else if(lampu.setSaklar(a)==1){
28             lampu.hidupkanLampu();
29         }else{
30             lampu.redupkanLampu();
31         }
32     }
33 }
```

Members

AplikasiLampu :: main(String[] args)

Output

Modul10 (run) x Modul10 (run) #2 x

```
1 Status Lampu = 0
2
3 0 untuk menyalaikan lampu
4 0 untuk mematikan lampu
5 2 untuk meredupkan lampu
6
7 Lampu sudah dalam kondisi redup
8
9 BUILD SUCCESSFUL (total time: 5 seconds)
```

Modul10 (run) running... 1 more... 26:35 INS

Modul10 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Files Services <default config...> Search (Ctrl+F)

Source History ...

```

11 public class Lampu implements ActivityLampu {
12     public int statusLampu;
13
14     @Override
15     public void matikanLampu() {
16         if(statusLampu==0) {
17             System.out.println("Lampu sudah dalam kondisi mati");
18         } else if(statusLampu==1) {
19             statusLampu=-1;
20             System.out.println("Lampu sudah dimatikan");
21         }
22     }
23
24     @Override
25     public void hidupkanLampu() {
26         if(statusLampu==1) {
27             System.out.println("Lampu sudah dinyalakan\n***");
28         } else {
29             statusLampu=1;
30             System.out.println("Lampu sudah dalam kondisi menyala");
31         }
32     }
33
34     @Override
35     public void redupkanLampu() {
36         if(statusLampu==2) {
37             System.out.println("Lampu sudah dalam kondisi redup\n***");
38         } else {
39             statusLampu=2;
40             System.out.println("Lampu sudah diredupkannya");
41         }
42     }
43
44     public int setSaklar(int saklar) {
45         return statusLampu = saklar;
46     }
47 }

```

Lampu > setSaklar > Notifications Output Modul10 (run) #2 x

Modul10 (run) running... (1 more...) 43:6 INS

## Hasil Output

Modul10 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Files Services <default config...> Search (Ctrl+F)

Source History ...

```

11 public class Lampu implements ActivityLampu {
12     public int statusLampu;
13
14     @Override
15     public void matikanLampu() {
16         System.out.println("Status Lampu = 0");
17         0 untuk menyakikan lampu
18         1 untuk mematikan lampu
19         2 untuk meredupkan lampu
20
21         Lampu sudah dalam kondisi redup
22         ***
23
24     }
25
26     @Override
27     public void hidupkanLampu() {
28         System.out.println("Status Lampu = 1");
29         0 untuk menyakikan lampu
30         1 untuk mematikan lampu
31         2 untuk meredupkan lampu
32
33         Lampu sudah dalam kondisi menyala
34         ***
35
36     }
37
38     @Override
39     public void redupkanLampu() {
40         System.out.println("Status Lampu = 2");
41         0 untuk menyakikan lampu
42         1 untuk mematikan lampu
43         2 untuk meredupkan lampu
44
45         Lampu sudah dalam kondisi redup
46         ***
47
48     }
49
50     public int setSaklar(int saklar) {
51         return statusLampu = saklar;
52     }
53 }

```

Lampu > setSaklar > Notifications Output Modul10 (run) #2 x

Modul10 (run) running... (1 more...) 43:6 INS

Nama : Aisyah Goevara

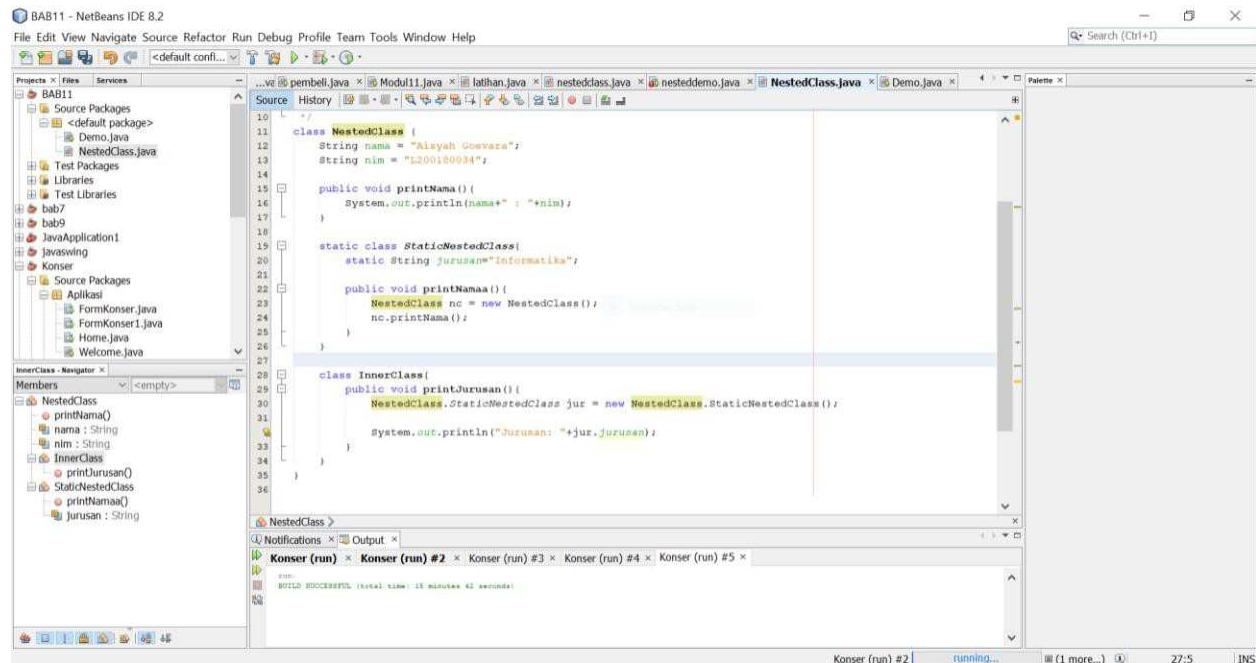
NIM : L200180034

Kelas : B

## Laporan Modul 11 Praktikum PBO

### Latihan

#### Class Nested



The screenshot shows the NetBeans IDE interface with the title "BAB11 - NetBeans IDE 8.2". The main window displays Java code for a class named NestedClass. The code includes methods for printing name and nim, and a static nested class for printing jurisdiction. The code is as follows:

```
10  class NestedClass {
11      String nama = "Aisyah Goevara";
12      String nim = "L200180034";
13
14      public void printNama() {
15          System.out.println(nama + " : " + nim);
16      }
17
18      static class StaticNestedClass {
19          static String jurusan="Informatika";
20
21          public void printJurusan() {
22              NestedClass nc = new NestedClass.StaticNestedClass();
23              nc.printNama();
24          }
25      }
26
27
28      class InnerClass{
29          public void printJurusan(){
30              NestedClass.StaticNestedClass jur = new NestedClass.StaticNestedClass();
31
32              System.out.println("Jurusan: "+jur.jurusan);
33          }
34      }
35
36 }
```

The code editor has syntax highlighting for Java keywords and comments. The bottom status bar shows the message "BUILD SUCCESSFUL (total time: 18 minutes 42 seconds)".

#### Class demo

BAB11 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Source History | .../pembelli.java | .../Modul11.java | .../lathan.java | .../nestedclass.java | .../nesteddemo.java | .../NestedClass.java | .../Demo.java | Palette | Search (Ctrl+F)

**Projects** BAB11  
 Source Packages <default package>  
 Demo.java NestedClass.java  
 Test Packages  
 Libraries  
 Test Libraries  
 bab7  
 bab9  
 JavaApplication1  
 Javawising  
 Konser  
 Source Packages Apilas  
 FormKonser.java FormKonser1.java Home.java Welcome.java  
 main - Navigator  
 Members Demo  
 main(String[] args)

```

1  /*
2   * To change this license header, choose License Headers in Project Properties.
3   * To change this template file, choose Tools | Templates
4   * and open the template in the editor.
5   */
6
7  /**
8   * $Author: LABRPL-9
9   */
10 public class Demo {
11     public static void main(String[] args) {
12         NestedClass nc = new NestedClass();
13
14         NestedClass.StaticNestedClass a = new NestedClass.StaticNestedClass();
15         a.printNama();
16
17         NestedClass.InnerClass ic = nc.new InnerClass();
18
19         ic.printJurusan();
20     }
21 }
22
  
```

Demo > main > a >

Notifications Output  
 Konser (run) x Konser (run) #2 x Konser (run) #3 x Konser (run) #4 x Konser (run) #5 x

BUILD SUCCESSFUL (total time: 15 minutes 42 seconds)

Konser (run) #2 | running... | (1 more...) | 15:27 | INS

## Output

BAB11 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Source History | .../pembelli.java | .../Modul11.java | .../lathan.java | .../nestedclass.java | .../nesteddemo.java | .../NestedClass.java | .../Demo.java | Palette | Search (Ctrl+F)

**Projects** BAB11  
 Source Packages <default package>  
 Demo.java NestedClass.java  
 Test Packages  
 Libraries  
 Test Libraries  
 bab7  
 bab9  
 JavaApplication1  
 Javawising  
 Konser  
 Source Packages Apilas  
 FormKonser.java FormKonser1.java Home.java Welcome.java  
 main - Navigator  
 Members Demo  
 main(String[] args)

```

1  /*
2   * To change this license header, choose License Headers in Project Properties.
3   * To change this template file, choose Tools | Templates
4   * and open the template in the editor.
5   */
6
7  /**
8   * $Author: LABRPL-9
9   */
10 public class Demo {
11     public static void main(String[] args) {
12         NestedClass nc = new NestedClass();
13
14         NestedClass.StaticNestedClass a = new NestedClass.StaticNestedClass();
15         a.printNama();
16
17         NestedClass.InnerClass ic = nc.new InnerClass();
18
19         ic.printJurusan();
20     }
21 }
22
  
```

Demo > main > a >

Notifications Output  
 Konser (run) x Konser (run) #2 x BAB11 (run) x

Ayah Gereva L3019180084  
 JURUSAN: Informatika  
 BUILD SUCCESSFUL (total time: 0 seconds)

Konser (run) #2 | running... | (1 more...) | 15:27 | INS

## **PRAKTIKUM MODUL 12**

**Nama : Guntur Jatmiko**

**NIM : L200180039**

**Kelas : B**

Modul12 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Services Files

Source Packages

- Lathan
  - Modul12
    - DemoLabel.java
    - DemoRadioButton.java
    - DemoTextField.java
    - FrameA.java
    - FrameB.java
    - Shizuka.png
    - Utama.java
    - luffy.jpg
  - Tugas
    - Tugas1.java
    - menu.java
- Test Packages
- Libraries
- Test Libraries

main - Navigator

Members

- DemoLabel
- main(String[] args)

```

1 package Lathan;
2
3 import java.net.URL;
4 import javax.swing.ImageIcon;
5 import javax.swing.JLabel;
6 import javax.swing.JPanel;
7 import javax.swing.SwingConstants;
8
9 /*
10  * To change this license header, choose License Headers in Project Properties.
11  * To change this template file, choose Tools | Templates.
12  * and open the template in the editor.
13  */
14
15 /**
16  * @author Win 8.1
17  */
18 public class DemoLabel {
19     public static void main(String[] args) {
20         Utama u = new Utama();
21         u.setSize(500, 500);
22         URL img = FrameB.class.getResource("Shizuka.png");
23         ImageIcon ikon = new ImageIcon(img);
24         JLabel label = new JLabel("Label", ikon, SwingConstants.CENTER);
25         JPanel panel = new JPanel();
26         panel.add(label);
27         u.add(panel);
28     }
29 }
30
31
32
33
34
35

```

Output

30:6 INS

Modul12 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Services Files

Source Packages

- Lathan
  - Modul12
    - DemoLabel.java
    - DemoRadioButton.java
    - DemoTextField.java
    - FrameA.java
    - FrameB.java
    - Shizuka.png
    - Utama.java
    - luffy.jpg
  - Tugas
    - Tugas1.java
    - menu.java
- Test Packages
- Libraries
- Test Libraries

Tugas1 - Navigator

Members

- Tugas1 :: Frame
- Tugas1()
  - main(String[] args)

```

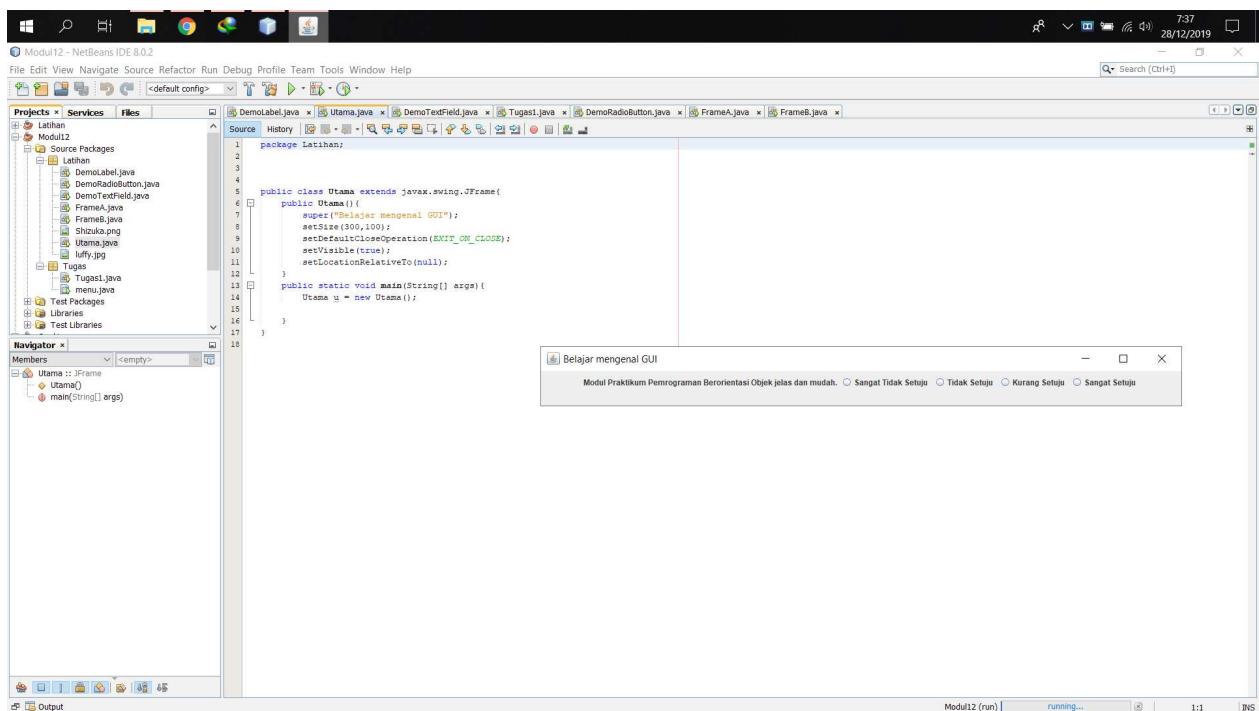
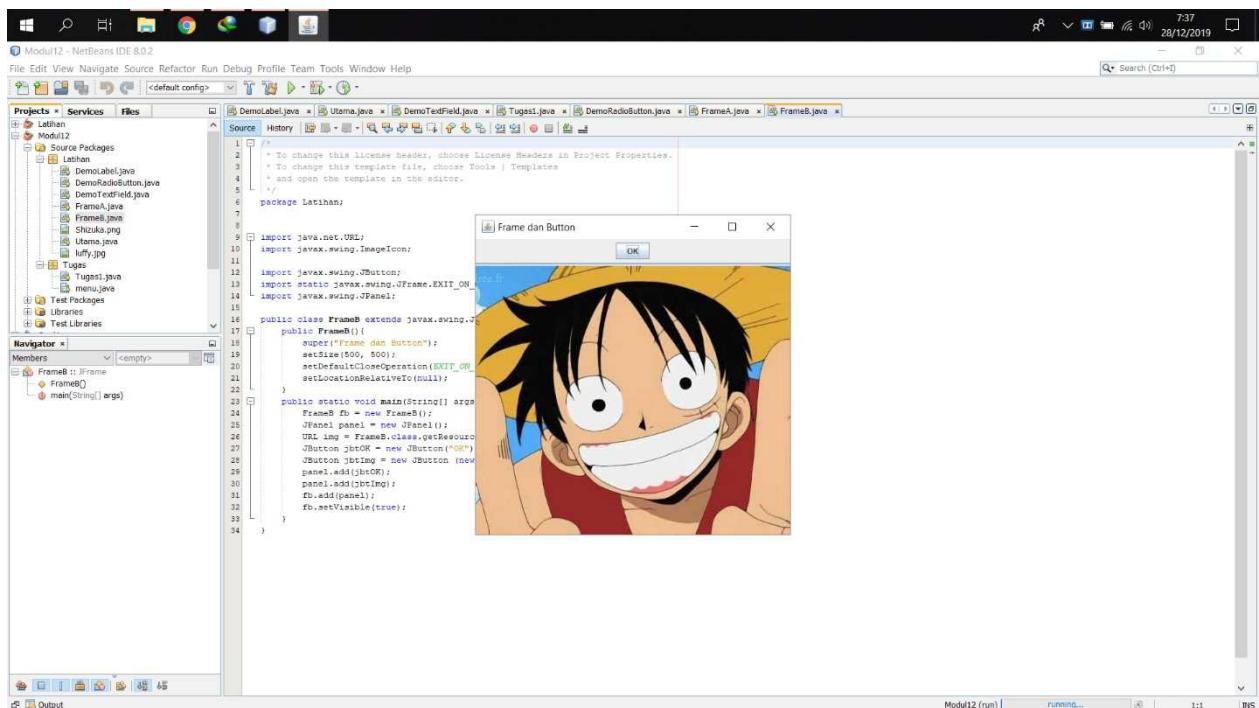
1 /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates.
4  * and open the template in the editor.
5  */
6 package Tugas;
7
8 import javax.swing.JComboBox;
9 import javax.swing.JLabel;
10 import javax.swing.JPanel;
11
12 /**
13  * @author Win 8.1
14  */
15 public class Tugas1 extends javax.swing.JFrame {
16     public Tugas1() {
17         super("Tugas 1");
18         setSize(1000, 300);
19         setDefaultCloseOperation(EXIT_ON_CLOSE);
20         setVisible(true);
21         setLocationRelativeTo(null);
22     }
23
24     public static void main(String[] args) {
25         Tugas1 t1 = new Tugas1();
26         String A[] = {"Sangat Tidak Setuju", "Tidak Setuju", "Setuju", "Sangat Setuju"};
27         JComboBox combo = new JComboBox(A);
28         JPanel panel = new JPanel();
29         JLabel persetujuan = new JLabel("Modul Praktikum Pemrograman Berorientasi Objek jelas dan mudah");
30         panel.add(persetujuan);
31         panel.add(combo);
32         t1.add(panel);
33         t1.setVisible(true);
34     }
35 }

```

Output - Modul12 (run)

run:

Output Building Modul12 (run)... Modul12 (run) 19:14 INS



Modul12 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Services Files

Source History

FrameB.java

```
1 // To change this license header, choose License Headers in Project Properties.
2 // To change this template file, choose Tools | Templates
3 // and open the template in the editor.
4 
5 package Latihan;
6 
7 import java.net.URL;
8 import javax.swing.ImageIcon;
9 
10 import javax.swing.JButton;
11 import static javax.swing.JFrame.EXIT_ON_CLOSE;
12 import javax.swing.JPanel;
13 import javax.swing.JFrame;
14 import javax.swing.JPanel;
15 
16 public class FrameB extends javax.swing.JFrame {
17 
18     public FrameB() {
19         super("Frame den Button");
20         setSize(100,50);
21         setDefaultCloseOperation(EXIT_ON_CLOSE);
22         setLocationRelativeTo(null);
23     }
24 
25     public static void main(String[] args) {
26         FrameB fb = new FrameB();
27         JPanel panel = new JPanel();
28         URL img = FrameB.class.getResource("luffy.jpg");
29         JButton jbOK = new JButton("OK");
30         JButton jbImg = new JButton (new ImageIcon(img));
31         panel.add(jbOK);
32         panel.add(jbImg);
33         fb.add(panel);
34         fb.setVisible(true);
35     }
36 }
```

Navigator

Members

FrameB :: JFrame

FrameB()

main(String[] args)

Output

Modul12 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Services Files

Source History

FrameA.java

```
1 package Latihan;
2 
3 import java.awt.Container;
4 import javax.swing.JButton;
5 
6 public class FrameA extends javax.swing.JFrame {
7 
8     public FrameA() {
9         super("Frame den Button");
10        setSize(100,50);
11        setDefaultCloseOperation(EXIT_ON_CLOSE);
12        setVisible(true);
13        setLocationRelativeTo(null);
14    }
15 
16    public static void main(String[] args) {
17        FrameA fa = new FrameA();
18        Container kontainer = fa.getContentPane();
19        JButton jbOK = new JButton("OK");
20        kontainer.add(jbOK);
21    }
22 }
```

Navigator

Members

FrameA :: JFrame

FrameA()

main(String[] args)

Output

Modul12 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Services Files

Source Packages Lathan Modul12

DemosLabel.java DemoRadioButton.java DemoTextField.java Tugas1.java DemoRadioButton.java

FrameA.java FrameB.java Shizuka.jpg

Tugas1.java menu.java

Test Packages Libraries Test Libraries

DemosLabel.java

```
1 package Lathan;
2
3
4 import javax.swing.JLabel;
5 import javax.swing.JPanel;
6 import javax.swing.JPasswordField;
7 import javax.swing.JTextField;
8
9 /*
10 * To change this license header, choose License Headers in Project Properties.
11 * To change this template file, choose Tools | Templates
12 * and open the template in the editor.
13 */
14
15 /**
16 *
17 * @author Win 8.1
18 */
19
20 public class DemoTextField {
21     public static void main(String[] args) {
22         Utama u = new Utama();
23         JLabel nama = new JLabel("Nama :");
24         JLabel password = new JLabel("Password : ");
25         JTextField inputname = new JTextField(15);
26         JPasswordField inputpw = new JPasswordField(15);
27         JPanel panel = new JPanel();
28         panel.add(nama);
29         panel.add(inputname);
30         panel.add(password);
31         panel.add(inputpw);
32         u.add(panel);
33     }
34 }
```

Navigator

Members DemoTextField

main(String[] args)

Output

Modul12 - NetBeans IDE 8.0.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Projects Services Files

Source Packages Lathan Modul12

DemosLabel.java DemoRadioButton.java DemoTextField.java Tugas1.java DemoRadioButton.java

FrameA.java FrameB.java Shizuka.jpg

Tugas1.java menu.java

Test Packages Libraries Test Libraries

DemosLabel.java

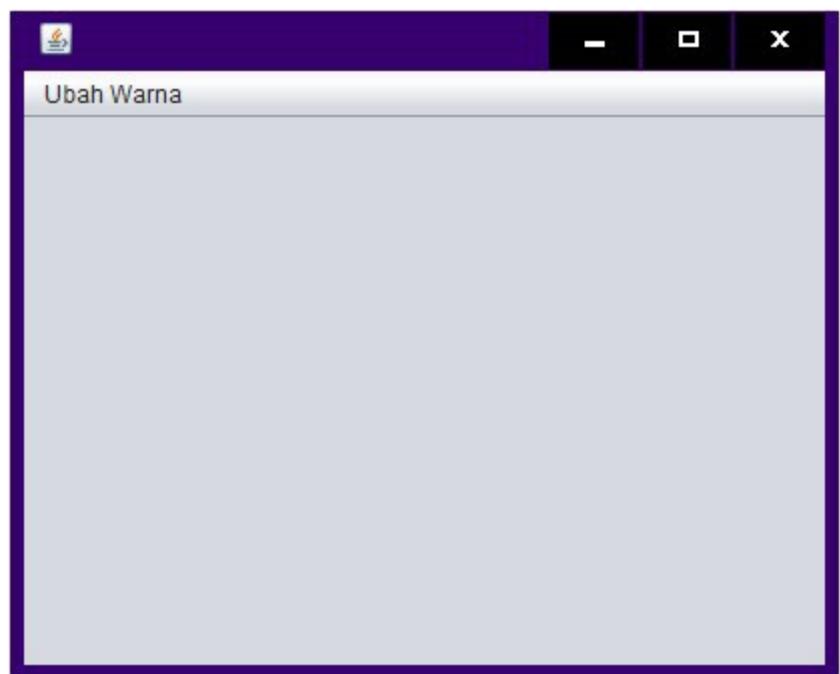
```
1 package Lathan;
2
3
4 import javax.swing.ButtonGroup;
5 import javax.swing.JLabel;
6 import javax.swing.JPanel;
7 import javax.swing.JRadioButton;
8
9
10 public class DemoRadioButton {
11     public static void main(String[] args) {
12         Utama u = new Utama();
13         u.setSize(1000, 100);
14
15         JRadioButton[] teams = new JRadioButton[4];
16         teams[0] = new JRadioButton("Sangat Tidak Setuju");
17         teams[1] = new JRadioButton("Kurang Setuju");
18         teams[2] = new JRadioButton("Kurang Setuju");
19         teams[3] = new JRadioButton("Setuju", true);
20         teams[4] = new JRadioButton("Sangat Setuju");
21
22         JPanel panel = new JPanel();
23         JPanel perjanjian = new JPanel();
24         JButton group = new JButton("Modul Praktikum Pemrograman Berorientasi Objek jelas dan mudah.");
25         perjanjian.add(group);
26         ButtonGroup group = new ButtonGroup();
27         for(int i = 0; i<teams.length; i++){
28             group.add(teams[i]);
29             panel.add(teams[i]);
30         }
31         u.add(panel);
32         u.setVisible(true);
33     }
34 }
35
36 }
```

Navigator

Members DemoRadioButton

main(String[] args)

Output





#### 12.1.1. Frame

- a. Lengkapi pengertian implementasi class JFrame pada tabel berikut ini!

| Konstruktor                 | Keterangan                  |
|-----------------------------|-----------------------------|
| <b>JFrame()</b>             | Membuat JFrame tanpa judul  |
| <b>JFrame(String Judul)</b> | Membuat JFrame dengan judul |

| Metode                                       | Keterangan   |
|--|--|
| <b>void setSize(int lebar, int tinggi)</b>   | Menentukan ukuran frame  |
| <b>void setLocation(int x, int y)</b>        | Menentukan lokasi frame dihitung dari kiri atas  |
| <b>void setVisible(Boolean)</b>              | Menentukan JFrame ditampilkan atau tidak   |
| <b>void setLocationRelativeTo(Component)</b> | Menentukan letak JFrame relative dengan komponen lainnya. Jika diset null, maka JFrame akan ditampilkan di tengah. |

### 12.1.2. Button

a. Lengkapi pengertian implementasi class JButton pada tabel berikut ini!

| Konstruktor                            | Keterangan                             |
|--|--|
| <b>JButton()</b>                       | Membuat JButton tanpa teks maupun icon |
| <b>JButton(String teks)</b>            | Membuat JButton dengan teks            |
| <b>JButton(Icon icon)</b>              | Membuat JButton dengan icon            |
| <b>JButton(String teks, Icon icon)</b> | Membuat JButton dengan teks dan icon   |

### 12.1.3. Label

- a. Lengkapi pengertian implementasi class JLabel pada tabel berikut ini

|                                      |  |
|--------------------------------------|--|
| JLabel (String teks, int i)          | Label dengan teks dan alignment (perataan).<br>Terdapat tiga jenis alignment : LEFT, CENTER, dan RIGHT |
| JLabel (String teks, Icon ic, int i) | Label dengan teks, icon, dan alignment   |

### 12.1.4. TextField dan Password Field

- a. Lengkapi pengertian implementasi class JTextField pada tabel di bawah ini.

| Konstruktor          | Keterangan        |
|----------------------|-------------------|
| JLabel (String teks) | Label dengan teks |

| Konstruktor                    | Penjelasan   |
|--------------------------------|--|
| JTextField()                   | Text field kosong tanpa tulisan                                |
| JTextField(int i)              | Text field dengan panjang yang ditentukan                      |
| JTextField(String i)           | Text field dengan teks yang sudah ditentukan                   |
| JTextField(String teks, int i) | Text field dengan teks dan Panjang kolom yang sudah ditentukan |

| Parameter dalam class JTextField | Penjelasan |
|----------------------------------|------------|
|                                  |            |

|                                |   |
|--------------------------------|---|
| <b>String Text</b>             | Teksi dalam Text field                                      |
| <b>Boolean Editable</b>        | Menentukan bisa tidaknya teks dalam Text field untuk diedit |
| <b>Int columns</b>             | Jumlah kolom pada Text field                                |
| <b>Int horizontalAlignment</b> | Perataan horizontal pada Text field                         |

#### 12.1.5. Radio Button dan CheckBox

a. Lengkapi pengertian implementasi class JCheckBox pada table berikut ini

| Konstruktor                             | Penjelasan   |
|---|--|
| <b>JCheckBox(String teks)</b>           | Check box dengan teks yang ditentukan  |
| <b>JCheckBox(String, Boolean)</b>       | Check box dengan teks yang ditentukan. jika kondisi pada parameter kedua true, maka Check box ini akan dipilih |
| <b>JCheckBox(icon)</b>                  | Check box dengan gambar icon   |
| <b>JCheckBox(icon, Boolean)</b>         | Check box dengan gambar icon dan terpilih jika true  |
| <b>JCheckBox(String, Icon)</b>          | Check box dengan tulisan dan gambar icon   |
| <b>JCheckBox(String, Icon, Boolean)</b> | Check box dengan tulisan dan gambar icon, akan dipilih secara default jika kondisi true.                       |