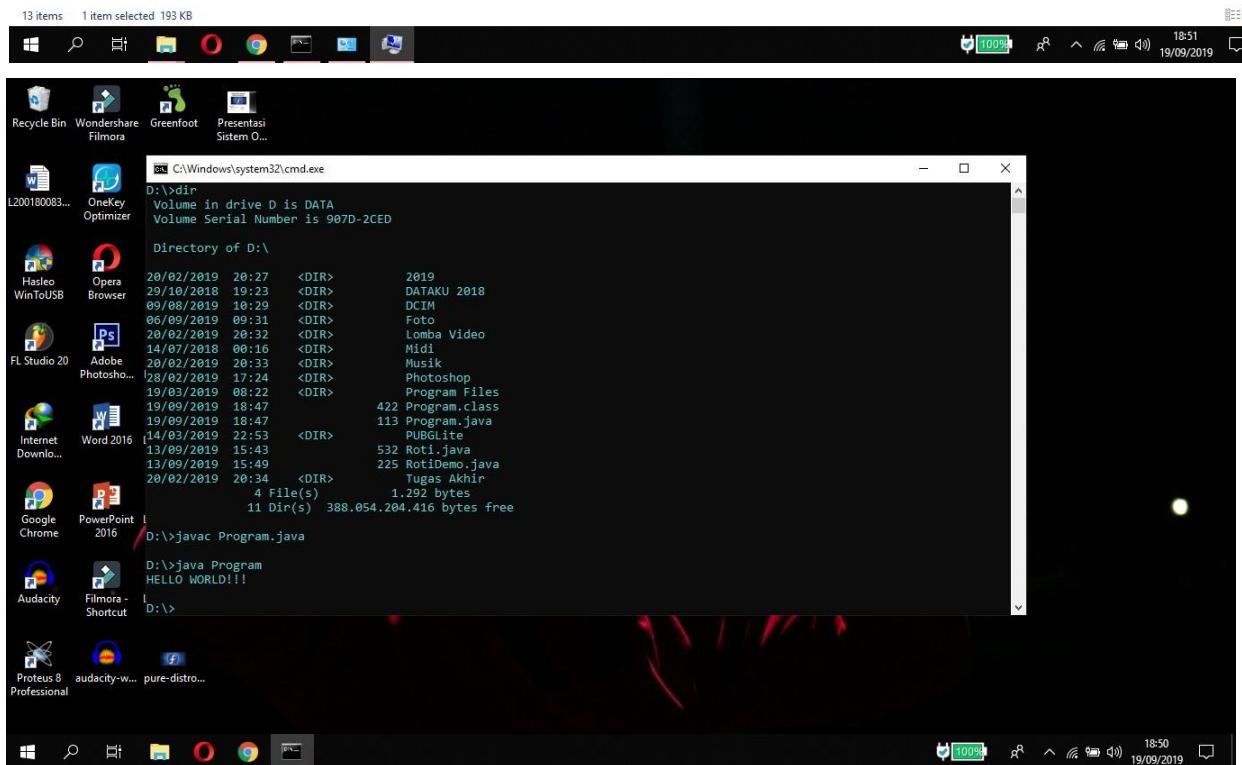
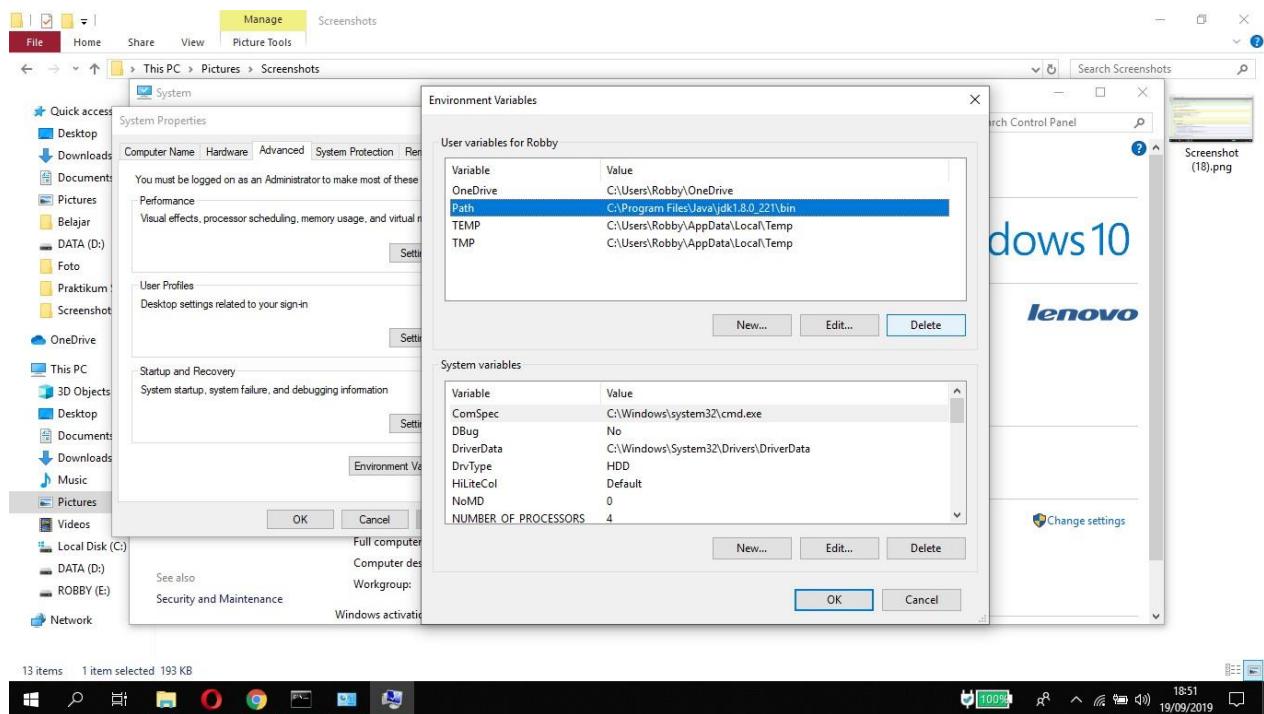


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Kelas : B

MODUL 1



MODUL 2

Tugas 1

Windows Command Prompt window showing Java compilation and execution:

```
C:\Users\DIUMI-PC>D
D:\>javac Roti.java
D:\>java RotiDemo
Murni Roti : Hijau
Rasa Roti : Pandan
Berat Roti : 30gr
Harga Roti : Rp. 6000.0
D:\>
```

Two Notepad windows showing Java code:

Roti.java - Notepad

```
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 + "gr" + "\n" +
            "Harga Roti : Rp. " + harga);
    }
}
```

RotiDemo.java - Notepad

```
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();
    }
}
```

Tugas 2

Windows Command Prompt window showing Java compilation and execution:

```
C:\Users\DIUMI-PC>color 8
C:\Users\DIUMI-PC>D
D:\>javac Hewan.java
D:\>java HewanDemo
Jumlah Kaki : 4
warna Hewan : Hitam Kecoklatan
Golongan : Jinak
Berat Hewan : 4
D:\>
```

Two Notepad windows showing Java code:

Hewan.java - Notepad

```
public class Hewan {
    String kaki;
    String warna;
    String golongan;
    int berat;

    void jumlahKaki(String kakiHewan) {
        kaki = kakiHewan;
    }

    void beriWarna(String warnaHewan) {
        warna = warnaHewan;
    }

    void golonganHewan(String sifatHewan) {
        golongan = sifatHewan;
    }

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

    void infoHewan() {
        System.out.println(
            "Jumlah Kaki : " + kaki + "\n" +
            "Warna Hewan : " + warna + "\n" +
            "Golongan : " + golongan + "\n" +
            "Berat Hewan : " + berat);
    }
}
```

HewanDemo.java - Notepad

```
public class HewanDemo {
    public static void main(String[] args) {
        Hewan hewan = new Hewan();
        hewan.jumlahKaki("4");
        hewan.beriwarna("Hitam Kecoklatan");
        hewan.golonganHewan("Jinak");
        hewan.timbangBerat(4);
        hewan.infoHewan();
    }
}
```

Tugas 3

The screenshot shows a Windows desktop environment. On the left, there's a vertical taskbar with icons for Wonder, Audia, and Mer. In the center, there are two Notepad windows side-by-side. The left Notepad window is titled 'Car.java - Notepad' and contains Java code for a 'Car' class with methods like changeCadence, speedUp, changeGear, and printInfo. The right Notepad window is titled 'CarDemo.java - Notepad' and contains Java code for a 'CarDemo' class with a main method that creates two 'Car' objects and calls their methods. Below these windows is a Command Prompt window titled 'Command Prompt' with the path 'C:\Users\DJUM-PC0'. It shows the output of running 'javac Car.java' and 'javac CarDemo.java', followed by the execution of 'java CarDemo', which prints the current cadence, speed, and gear for two cars.

```
C:\Users\DJUM-PC0>javac Car.java
C:\Users\DJUM-PC0>javac CarDemo.java
C:\Users\DJUM-PC0>java CarDemo
Cadence : 50
Speed : 20
Gear : 2
Cadence : 30
Speed : 10
Gear : 1
Cadence : 50
Speed : 20
Gear : 2
Cadence : 30
Speed : 10
Gear : 1
C:\Users\DJUM-PC0>
```

```
Car.java - Notepad
File Edit Format View Help
public class Car {
    int cadence;
    int speed;
    int gear;

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

    void speedUp(int speedUp) {
        speed = speedUp;
    }

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

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

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.printInfo();

        car2.changeCadence(30);
        car2.speedUp(10);
        car2.changeGear(1);
        car2.printInfo();
    }
}
```

MODUL 3

Latihan 1

The screenshot shows a Sublime Text editor with three tabs: 'Pegawai.java', 'LocalVariable.java', and 'MethodParameter.java'. The 'LocalVariable.java' tab is active and contains Java code for a 'LocalVariable' class with methods 'hitungUsia' and 'beratBadan', and a static 'main' method. To the right of the editor is a Command Prompt window titled 'Command Prompt' with the path 'C:\Users\Ray~\Documents\Java'. It shows the output of running 'javac LocalVariable.java' and 'java LocalVariable', which prints 'Usia Saya :19 Berat badan saya: 13 Kg'. It also shows the output of running 'javac MethodParameter.java' and 'java MethodParameter', which prints 'Taufiq'. Finally, it shows the output of running 'javac LocalVariable.java' again, which results in an error message about a symbol not being found.

```
C:\Users\Ray~\Documents\Java>javac LocalVariable.java
C:\Users\Ray~\Documents\Java>java LocalVariable
Usia Saya :19
Berat badan saya: 13 Kg

C:\Users\Ray~\Documents\Java>javac MethodParameter.java
C:\Users\Ray~\Documents\Java>java MethodParameter
Taufiq

C:\Users\Ray~\Documents\Java>javac LocalVariable.java
LocalVariable.java:16: error: cannot find symbol
    berat = beratLahir + (usia/2);
                           ^
      symbol:   variable usia
      location: class LocalVariable
1 error
C:\Users\Ray~\Documents\Java>
```

Tidak bisa berjalan karena local variable hanya dapat digunakan pada method tersebut saja.

Latihan 2

The screenshot shows a Sublime Text editor with two tabs: 'Pegawai.java' and 'LocalVariable.java'. The 'LocalVariable.java' tab contains the following Java code:

```
1 public class LocalVariable{
2     int usia = 0;
3     public void hitungUsia() {
4         int tahunSekarang = 2019;
5         int tahunLahir = 2000;
6
6         usia = tahunSekarang - tahunLahir;
7
8         System.out.println("Usia Saya :" + usia );
9     }
10    public void beratBadan(){
11        int beratLahir = 4;
12        int berat = 0;
13
14        berat = beratLahir + (usia/2);
15
16        System.out.println("Berat badan saya: " + berat + " Kg");
17    }
18
19
20    public static void main(String[] args){
21        LocalVariable usia = new LocalVariable();
22        usia.hitungUsia();
23        usia.beratBadan();
24    }
25 }
```

To the right of the editor is a 'Command Prompt' window showing the execution of the code:

```
C:\Users\Ray~\Documents\Java>javac LocalVariable.java
C:\Users\Ray~\Documents\Java>java LocalVariable
Usia Saya :19
Berat badan saya: 13 Kg
C:\Users\Ray~\Documents\Java>
```

Latihan 3

The screenshot shows a Sublime Text editor with two tabs: 'Pegawai.java' and 'LocalVariable.java'. The 'Pegawai.java' tab contains the following Java code:

```
1 public class Pegawai{
2     String nama;
3     int nip;
4     double gaji;
5     public String setNama (String nama){
6         return this.nama = nama;
7     }
8     public int setNip (int nip){
9         return this.nip = nip;
10    }
11    public double setGaji (double gaji){
12        return this.gaji = gaji;
13    }
14
15    public static void main (String[] args){
16        Pegawai hiya1 = new Pegawai();
17        Pegawai hiya2 = new Pegawai();
18        Pegawai hiya3 = new Pegawai();
19        Pegawai hiya4 = new Pegawai();
20        Pegawai hiya5 = new Pegawai();
21
22        hiya1.setNama("Dila");
23        hiya1.setNip(112235);
24        hiya1.setGaji(100000.0)
25
26        hiya2.setNama("Aku");
27        hiya2.setNip(112234);
28        hiya2.setGaji(120000.0)
29
30        hiya3.setNama("Kamu");
31        hiya3.setNip(112235);
32        hiya3.setGaji(130000.0);
33
34        hiya4.setNama("Koe");
35        hiya4.setNip(112236);
36        hiya4.setGaji(1400000.0);
37
38        hiya5.setNama("Cieee");
39
40    }
41 }
```

To the right of the editor is a 'Command Prompt' window showing the execution of the code:

```
Usage: javac <options> <source files>
use -help for a list of possible options
C:\Users\Ray~>cd C:\Users\Ray~\Documents\Java
C:\Users\Ray~\Documents\Java>javac Pegawai.java
C:\Users\Ray~\Documents\Java>java Pegawai
Nama : Dia
NIP : 112233
Gaji : 1100000.0
Nama: Aku
NIP : 112234
Gaji : 1200000.0
Nama : Kamu
NIP : 112235
Gaji : 1300000.0
Nama : Cieee
NIP : 112237
Gaji : 1500000.0
C:\Users\Ray~\Documents\Java>
```

Pekerjaan Rumah 1

The screenshot shows a Sublime Text window with two tabs: 'Nilai.java' and 'Nilai.java'. The code in 'Nilai.java' is as follows:

```
1 public class Nilai{
2     int nilaiUTS;
3     int nilaiUAS;
4     int nilaiTugas;
5
6     public int setUTS (int nilaiUTS){
7         return this.nilaiUTS = nilaiUTS;
8     }
9     public int setUAS (int nilaiUAS){
10        return this.nilaiUAS = nilaiUAS;
11    }
12    public int setTugas (int nilaiTugas){
13        return this.nilaiTugas = nilaiTugas;
14    }
15    public void info(){
16        System.out.println("nilai UTS : " + this.setUTS(70));
17        System.out.println("nilai UAS : " + this.setUAS(75));
18        System.out.println("nilai Tugas : " + this.setTugas(80));
19    }
20    public static void main(String[] args) {
21        Nilai hs = new Nilai();
22
23        hs.info();
24    }
25 }
```

To the right, a Command Prompt window shows the output of running the code:

```
Microsoft Windows [Version 10.0.17134.590]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Ray~\Documents\Java>cd C:\Users\Ray~\Documents\Java
C:\Users\Ray~\Documents\Java>javac Nilai.java
C:\Users\Ray~\Documents\Java>java Nilai
nilai UTS : 70
nilai UAS : 75
nilai Tugas : 80
```

Pekerjaan Rumah 2

The screenshot shows a Sublime Text window with two tabs: 'Nilai.java' and 'Nilai.java'. The code in 'Nilai.java' is as follows:

```
1 public class Nilai{
2     double nilaiUTS;
3     double nilaiUAS;
4     double nilaiTugas;
5
6     public double setUTS (double nilaiUTS){
7         return this.nilaiUTS = nilaiUTS;
8     }
9     public double setUAS (double nilaiUAS){
10        return this.nilaiUAS = nilaiUAS;
11    }
12    public double setTugas (double nilaiTugas){
13        return this.nilaiTugas = nilaiTugas;
14    }
15    public void info(){
16        System.out.println("nilai UTS : " + this.setUTS(70));
17        System.out.println("nilai UAS : " + this.setUAS(75));
18        System.out.println("nilai Tugas : " + this.setTugas(80));
19    }
20    public void hitung(){
21        double nilaiTotal;
22
23        nilaiTotal = (nilaiUTS + nilaiUAS + nilaiTugas) / 3;
24
25        System.out.println("Nilai Total : " + nilaiTotal);
26    }
27    public static void main(String[] args) {
28        Nilai hs = new Nilai();
29
30        hs.info();
31        hs.hitung();
32    }
33 }
```

To the right, a Command Prompt window shows the output of running the code:

```
Microsoft Windows [Version 10.0.17134.590]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Ray~\cd C:\Users\Ray~\Documents\Java
C:\Users\Ray~\Documents\Java>javac Nilai.java
C:\Users\Ray~\Documents\Java>java Nilai
nilai UTS : 70.0
nilai UAS : 75.0
nilai Tugas : 80.0
Nilai Total : 75.0
```

MODUL 4

Private Modifier

```
1 package module4;
2
3 public class PrivateModifier {
4     private String name;
5     private int umur;
6
7     public void printInfo(){
8         System.out.println("Private modifier");
9     }
10}
11
12
```

Navigator

- Members
- PrivateModifier
 - printInfo()
 - name : String
 - umur : int

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

```
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 module4;
7
8 /**
9  * Author DJUN-PC
10 */
11
12 public class Private {
13     public static void main (String[] args) {
14         PrivateModifier aksesVar = new PrivateModifier();
15         System.out.println(aksesVar.name);
16         System.out.println(aksesVar.umur);
17     }
18 }
19
20
```

Output - Modul4 (run) *

```
run:
Exception in thread "main" java.lang.RuntimeException: Uncompilable source code - name has private access in module4.PrivateModifier
        at module4.Private.main(Private.java:11)
Java Result: 1
BUILD SUCCESSFUL (total time: 1 second)
```

Modul4 - NetBeans IDE 8.0.2

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

Start Page | PrivateModifier.java | Private.java | DefaultModifier.java | Default.java | Default1.java | ProtectedModifier.java | Protected.java | PublicModifier.java | Public.java | Public1.java

Project Services

Source Packages

- odu4
 - Javaj
 - Default.java
 - Public.java
 - module
 - Default.java
 - DefaultModifier.java
 - Private.java
 - PrivateModifier.java
 - Protected.java
 - ProtectedModifier.java
 - Public.java
 - PublicModifier.java

Libraries

main - Navigator

Members

Private

main(String[] args)

Output - Modul4 (run) :

```

run
private modifier
BUILD SUCCESSFUL (total time: 2 seconds)

```

Finished building Modul4 (run).

17:30 141 09/10/2019

Default Modifier

Modul4 - NetBeans IDE 8.0.2

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

Start Page | PrivateModifier.java | Private.java | DefaultModifier.java | Default.java | Default1.java | ProtectedModifier.java | Protected.java | PublicModifier.java | Public.java | Public1.java

Project Services

Source Packages

- odu4
 - Javaj
 - Default.java
 - Public.java
 - module
 - Default.java
 - DefaultModifier.java
 - Private.java
 - PrivateModifier.java
 - Protected.java
 - ProtectedModifier.java
 - Public.java
 - PublicModifier.java

Libraries

DefaultModifier ->

Members

DefaultModifier

- jumlah()
 - a: int
 - b: int
 - c: int

Output - Modul4 (run) :

```

run
DefaultModifier
BUILD SUCCESSFUL (total time: 2 seconds)

```

17:2 141 09/10/2019

Modul4 - NetBeans IDE 8.0.2

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

Project Services Start Page PrivateModifier.java Private.java DefaultModifier.java Default.java Default1.java ProtectedModifier.java Protected.java PublicModifier.java Public.java Public1.java

Source Packages modul4

- Jajal
 - Default.java
 - DefaultModifier.java
 - Protected.java
 - ProtectedModifier.java
 - Public.java
 - PublicModifier.java

modul4

- Default.java
- DefaultModifier.java
- Protected.java
- ProtectedModifier.java
- Public.java
- PublicModifier.java

Libraries

main - Navigator x

Members Default main(String[] args)

Output - Modul4 (run) x

```

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 modul4;
7
8 public class Default {
9     public static void main (String[] args){
10         DefaultModifier defaultVar = new DefaultModifier();
11         System.out.println(defaultVar.a);
12         System.out.println(defaultVar.b);
13         DefaultVar.jumlah();
14     }
15 }
16
17

```

run:
1
2
3
BUILD SUCCESSFUL (total time: 1 second)

Finished building Modul4 (run).

14:27 142 09/10/2019

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

Modul4 - NetBeans IDE 8.0.2

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

Project Services Start Page PrivateModifier.java Private.java DefaultModifier.java Default.java Default1.java ProtectedModifier.java Protected.java PublicModifier.java Public.java Public1.java

Source Packages modul4

- Jajal
 - Default.java
 - DefaultModifier.java
 - Protected.java
 - ProtectedModifier.java
 - Public.java
 - PublicModifier.java

modul4

- Default.java
- DefaultModifier.java
- Protected.java
- ProtectedModifier.java
- Public.java
- PublicModifier.java

Libraries

main - Navigator x

Members Default main(String[] args)

Output - Modul4 (run) x

```

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 Jajal;
7
8 import modul4.DefaultModifier;
9
10 public class Default1 {
11     public static void main (String[] args){
12         DefaultModifier defaultVar = new DefaultModifier();
13         System.out.println(defaultVar.a);
14         System.out.println(defaultVar.b);
15     }
16 }
17
18

```

run:
Exception in thread "main" java.lang.RuntimeException: Uncompilable source code - a is not public in modul4.DefaultModifier; cannot be accessed from outside package
at Jajal.Default1.main(Default1.java:11)
Java Result: 1
BUILD SUCCESSFUL (total time: 1 second)

Finished building Modul4 (run).

16:40 142 09/10/2019

Protected Modifier

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

- Title Bar:** Modul4 - NetBeans IDE 8.0.2
- Toolbar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Project Explorer:** Shows the project structure with packages like Javaj, module, and libraries.
- Code Editor:** Displays the `ProtectedModifier.java` file. The code defines a class `ProtectedModifier` with a protected constructor and two protected methods: `printInfo()` and `sendMessage()`. The `sendMessage()` method prints "this is a message".
- Navigator:** Shows the members of the `ProtectedModifier` class.
- Output:** Shows the build log: "BUILD SUCCESSFUL (total time: 2 seconds)".
- System Tray:** Shows icons for network, battery, and date/time (09/10/2019).

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

- Title Bar:** Modul4 - NetBeans IDE 8.0.2
- Toolbar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Project Explorer:** Shows the project structure with packages like Javaj, module, and libraries.
- Code Editor:** Displays the `ProtectedModifier.java` file. The code defines a class `Protected` with a static main method. Inside the main method, it creates a `ProtectedModifier` object, calls its `printInfo()` method, and then its `sendMessage()` method.
- Navigator:** Shows the members of the `Protected` class, specifically the `main(String[] args)` method.
- Output - Modul4 (run):** Shows the run log:

```
run:
Protected Modifier
this is a message
BUILD SUCCESSFUL (total time: 2 seconds)
```
- System Tray:** Shows icons for network, battery, and date/time (09/10/2019).

Public Modifier

NetBeans IDE 8.0.2

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

Start Page | PrivateModifier.java | Private.java | DefaultModifier.java | Default.java | Default1.java | ProtectedModifier.java | Protected.java | PublicModifier.java | Public.java | Public1.java

Java Packages

- java
- Default.java
- Public.java
- DefaultModifier.java
- Private.java
- ProtectedModifier.java
- Protected.java
- ProtectedModifier.java
- Public.java
- PublicModifier.java

Libraries

kurang - Navigator

Members

- PublicModifier
- bagi()
- kali()
- kurang()
- rata_rata()
- tambah()
- a : int
- b : int
- c : int

```
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 modul4;  
7 /*  
8 *  
9 * @author DJHM-PC  
10 */  
11 public class PublicModifier {  
12     public int a = 2;  
13     public int b = 5;  
14     public int c = 9;  
15     public void kali(){  
16         int d = a*b*c;  
17         System.out.println("Hasil kali = " + d);  
18     }  
19     public void tambah(){  
20         int e = a+b+c;  
21         System.out.println("Hasil tambah = " + e);  
22     }  
23     public void kurang(){  
24         int f = a-b-c;  
25         System.out.println("Hasil kurang = " + f);  
26     }  
27     public void bagi(){  
28         int g = a/b/c;  
29         System.out.println("Hasil bagi = " + g);  
30     }  
31     public void rata_rata(){  
32         int h = (a+b+c)/3;  
33         System.out.println("Hasil rata-rata = " + h);  
34     }  
35 }  
36 }  
37 }
```

Modul4 - NetBeans IDE 8.0.2

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

Start Page | PrivateModifier.java | Private.java | DefaultModifier.java | Default.java | Default1.java | ProtectedModifier.java | Protected.java | PublicModifier.java | Public.java | Public1.java

Java Packages

- java
- Default.java
- Public.java
- DefaultModifier.java
- Private.java
- ProtectedModifier.java
- Protected.java
- ProtectedModifier.java
- Public.java
- PublicModifier.java

Libraries

Navigator

Members

- Public
- 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 modul4;  
7 /*  
8 *  
9 * @author DJHM-PC  
10 */  
11 public class Public {  
12     public static void main(String[] args){  
13         PublicModifier pub = new PublicModifier();  
14         System.out.println(pub.a);  
15         System.out.println(pub.b);  
16         System.out.println(pub.c);  
17         pub.kali();  
18         pub.tambah();  
19         pub.kurang();  
20         pub.bagi();  
21         pub.rata_rata();  
22     }  
23 }  
24 }  
25 }
```

Output - Modul4 (run) :

```
run:  
1  
2  
3  
4  
5  
6  
Hasil kali = 90  
Hasil tambah = 14  
Hasil kurang = -12  
Hasil bagi = 0  
Hasil rata-rata = 5  
BUILD SUCCESSFUL (total time: 1 second)
```

Finished Building Modul4 (run).

Modul4 - NetBeans IDE 8.0.2

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

Search (Ctrl+F)

Project Services Start Page PrivateModifier.java Private.java DefaultModifier.java Default.java Default1.java ProtectedModifier.java Protected.java PublicModifier.java Public.java Public1.java

Source Packages modul4 Java Default.java Public.java module Default.java DefaultModifier.java Private.java PrivateModifier.java Protected.java ProtectedModifier.java Public.java PublicModifier.java

Libraries

Navigator Members Public1 main(String[] args)

Output - Modul4 (run) run:
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

```
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 java1;  
7 //  
8 import modul4.PublicModifier;  
9 //  
10 // Author DJHM-PC  
11 //  
12 public class Public1  
13 {  
14     public static void main(String[] args){  
15         PublicModifier pub = new PublicModifier();  
16         System.out.println(pub.a);  
17         System.out.println(pub.b);  
18         System.out.println(pub.c);  
19         pub.hello();  
20         pub.tambah();  
21         pub.kurang();  
22         pub.bagi();  
23         pub.rata_rata();  
24     }  
}
```

21:22 144 09/10/2019

MODUL 5

PrakPBO - NetBeans IDE 8.0.2

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

Projects Services Files default config

Source History -> -> <empty> Search (Ctrl+F)

Projects Modul Modul4 prakPBO Source Packages prakpbo DefaultAccess.java DefaultConstructor.java ParameterAccess.java ParameterConstructor.java PrakPBO.java Tugas.java TugasAccess.java Libraries Project PBO TUGAS

Source

```
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 prakpbo;
7
8  /**
9   * @author DJHM-PC
10  */
11 public class DefaultConstructor {
12     String nama = "Rifqi Aditya Mahendra";
13     String nim = "L100180083";
14     String alamat = "Rudesa";
15
16     public DefaultConstructor() {
17         System.out.println(
18             "Nama : " + nama + "\n"
19             "NIM : " + nim + "\n"
20             "Alamat : " + alamat + "\n");
21     }
22 }
23
24 
```

DefaultConstructor - Navigator

Members DefaultConstructor

- DefaultConstructor()
 - alamat : String
 - nama : String
 - nim : String

Output

22:6 17/10/2019

PrakPBO - NetBeans IDE 8.0.2

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

Projects Services Files default config

Source History -> -> <empty> Search (Ctrl+F)

Projects Modul Modul4 prakPBO Source Packages prakpbo DefaultAccess.java DefaultConstructor.java ParameterAccess.java ParameterConstructor.java PrakPBO.java Tugas.java TugasAccess.java Libraries Project PBO TUGAS

Source

```
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 prakpbo;
7
8  /**
9   * @author DJHM-PC
10  */
11 public class DefaultAccess {
12     public static void main(String[] args) {
13         DefaultConstructor cons = new DefaultConstructor();
14     }
15 }
16
17 
```

main - Navigator

Members DefaultAccess

- main(String[] args)

Output - PrakPBO (run)

run:

Name : Rifqi Aditya Mahendra
NIM : L100180083
Alamat : Rudesa

BUILD SUCCESSFUL (total time: 0 seconds)

15:6 17/10/2019

PrakPBO - NetBeans IDE 8.0.2

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

default config > default config

Projects Services Files DefaultConstructor.java DefaultAccess.java ParameterConstructor.java ParameterAccess.java Tugas.java TugasAccess.java

Source History > Search (Ctrl+F) > <empty>

```

4  * and open the template in the editor.
5  */
6  package prakpbo;
7
8 /**
9  * Author DJHM-PC
10 */
11 public class ParameterConstructor {
12     String namaPengarang, judulBuku;
13     int tahunTerbit, cetakanKe;
14     double hargaJual;
15
16     public ParameterConstructor(String judulBuku, String namaPengarang) {
17         this.judulBuku = judulBuku;
18         this.namaPengarang = namaPengarang;
19     }
20
21     public ParameterConstructor(int tahunTerbit, int cetakanKe) {
22         this.tahunTerbit = tahunTerbit;
23         this.cetakanKe = cetakanKe;
24     }
25
26     public ParameterConstructor(double hargaJual) {
27         this.hargaJual = hargaJual;
28     }
29
30     public void infoBuku() {
31         System.out.println(
32             "Judul Buku : " + judulBuku + "\n" +
33             "Nama Pengarang : " + namaPengarang
34         );
35     }
36
37     public void infoBuku1() {
38         System.out.println(
39             "Tahun Terbit : " + tahunTerbit + "\n" +
40             "Cetakan ke : " + cetakanKe
41         );
42     }
43
44     public void infoBuku2() {
45         System.out.println(
46             "Harga : " + hargaJual + "\n"
47         );
48     }
49 }

```

Members <empty>

ParameterConstructor

- ParameterConstructor(String judulBuku, String namaPengarang)
- ParameterConstructor(int tahunTerbit, int cetakanKe)
- ParameterConstructor(double hargaJual)
- infobuku()
- infobuku1()
- infobuku2()
- cetakanKe: int
- judulBuku: String
- namaPengarang: String
- tahunTerbit: int

Navigator <empty>

49:6 21:32 17/10/2019

PrakPBO - NetBeans IDE 8.0.2

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

default config > default config

Projects Services Files DefaultConstructor.java DefaultAccess.java ParameterConstructor.java ParameterAccess.java Tugas.java TugasAccess.java

Source History > Search (Ctrl+F) > <empty>

```

4  * and open the template in the editor.
5  */
6  package prakpbo;
7
8 /**
9  * Author DJHM-PC
10 */
11 public class ParameterAccess {
12     public static void main(String[] args) {
13         ParameterConstructor a = new ParameterConstructor("Java", "Mundardo");
14         ParameterConstructor a1 = new ParameterConstructor(2003, 2);
15         ParameterConstructor a2 = new ParameterConstructor(36000.0);
16         a.infoBuku();
17         a1.infoBuku();
18         a2.infoBuku();
20
21         ParameterConstructor b = new ParameterConstructor("Laju", "Djum");
22         ParameterConstructor b1 = new ParameterConstructor(2006, 6);
23         ParameterConstructor b2 = new ParameterConstructor(33000.0);
24         b.infoBuku();
25         b1.infoBuku();
26         b2.infoBuku();
27
28         ParameterConstructor c = new ParameterConstructor("Te-Elalu", "Maung Jhon");
29         ParameterConstructor c1 = new ParameterConstructor(2017, 11);
30         ParameterConstructor c2 = new ParameterConstructor(45000.0);
31         c.infoBuku();
32         c1.infoBuku();
33         c2.infoBuku();
34     }
35 }

```

main - Navigator <empty>

Members <empty>

ParameterAccess

- main(String[] args)

Output - PrakPBO (run) >

```

Model Main Class
Judul Buku : Mundardo
Nama Pengarang : Mundardo
Tahun Terbit : 2003
Cetakan ke : 2
Harga : 36000.0
Judul Buku : Laju
Nama Pengarang : Djum
Tahun Terbit : 2006
Cetakan ke : 6
Harga : 33000.0
Judul Buku : Te-Elalu
Nama Pengarang : Maung Jhon
Tahun Terbit : 2017
Cetakan ke : 11

```

33:24 21:33 17/10/2019

PrakPBO - NetBeans IDE 8.0.2

```

    1  * and open the template in the editor.
    2  */
    3  package prakpbo;
    4
    5  /**
    6   * @author DARM-PC
    7   */
    8  public class Tugas {
    9      String nama, nim;
   10     int Semester, angkatan;
   11
   12     public Tugas() {
   13         System.out.println("Selamat datang Mahasiswa/i UMS");
   14     }
   15
   16     public Tugas(String nama, String nim, int Semester, int angkatan) {
   17         this.nama = nama;
   18         this.nim = nim;
   19         this.Semester = Semester;
   20         this.angkatan = angkatan;
   21     }
   22
   23     public void infoMahasiswa() {
   24         System.out.println(
   25             "Nama : " + nama + "\n" +
   26             "NIM : " + nim + "\n" +
   27             "Semester : " + Semester + "\n" +
   28             "Angkatan : " + angkatan
   29         );
   30     }
   31
   32 }
   33
   34
   35
  
```

infoMahasiswa()

Members <empty>

- Tugas
 - Tugas()
 - Tugas(String nama, String nim, int Semester, int angkatan)
 - infoMahasiswa()
 - Semester : int
 - angkatan : int
 - nama : String
 - nim : String

25:5 21:34 17/10/2019

PrakPBO - NetBeans IDE 8.0.2

```

 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 prakpbo;
 7
 8  /**
 9   * @author DARM-PC
10   */
11  public class TugasAccess {
12      public static void main(String[] args) {
13          Tugas d = new Tugas();
14          Tugas d1 = new Tugas("Rifqi Aditya Mahendra", "L200180083", 3, 2018);
15          d.infoMahasiswa();
16      }
17  }
18
19
  
```

main - Navigator

Members <empty>

- TugasAccess
 - main(String[] args)

Output - PrakPBO (run) :

```

 1  Selamat datang Mahasiswa/i UMS
 2  Nama : Rifqi Aditya Mahendra
 3  NIM : L200180083
 4  Semester : 3
 5  Angkatan : 2018
 6  BUILD SUCCESSFUL (total time: 0 seconds)
  
```

Finished building PrakPBO (run).

13:18 21:35 17/10/2019

MODUL 6

Latihan

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

- Projects:** A, B, C, DemoPegawai, InheritanceLatihan, InheritanceTest, Kendaraan, Mobil, Pegawai, Pesawat, Teknis, YYYY.
- Current File:** InheritanceLatihan.java
- Code:**

```
6 package belajar;
7
8 /**
9 * 
10 * @author Djum
11 */
12 public class InheritanceLatihan extends Kendaraan {
13     public static void main(String[] args){
14         String info;
15         Pesawat p = new Pesawat();
16         Mobil m = new Mobil();
17         Kendaraan ken = new Kendaraan();
18         info = "Ini adalah kendaraan " + ken.jenis + " dan merupakan golongan " + ken.gol;
19         System.out.println(p.bahanBakar);
20         System.out.println(m.jumlahKursi);
21         m.info();
22         p.info();
23     }
24 }
25
26
```

- Output:**

```
penjualanelektronik (run) #2 | Belajar (run) |
run:
Avtur
€
Mobil memiliki Kursi 6 dan roda Banyak
Pesawat memiliki roda Banyak dan bahan bakar Avtur
BUILD SUCCESSFUL (total time: 0 seconds)
```

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

- Projects:** Belajar, Source Packages
- Current File:** Kendaraan.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 belajar;
7
8 /**
9 * 
10 * @author Djum
11 */
12 public class Kendaraan {
13     String jumlahKoda = "Banyak";
14     String jenis = "Darat dan Udara";
15     String gol = "Menengah";
16 }
17
18
```

- Output:**

```
penjualanelektronik (run) #2 | Belajar (run) |
run:
Avtur
€
Mobil memiliki Kursi 6 dan roda Banyak
Pesawat memiliki roda Banyak dan bahan bakar Avtur
BUILD SUCCESSFUL (total time: 0 seconds)
```

Belajar - NetBeans IDE 8.0.2

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

Projects Services Files

Mobil.java

```
4  * and open the template in the editor.
5  */
6 package belajar;
7
8 /**
9 *
10 * @author Djum
11 */
12 public class Mobil {
13     int jumlahKursi = 6;
14     Kendaraan m = new Kendaraan();
15     String info;
16     void info(){
17         info = "Mobil memiliki Kursi " + jumlahKursi + " dan roda " + m.jumlahRoda;
18         System.out.println(info);
19     }
20 }
21
22
23
24
```

Mobil - Navigator

Members <empty>

Mobil

- info()
- info : String
- jumlahKursi : int
- m : Kendaraan

Output

penjualanelektronik (run) #2 x Belajar (run) x

```
run:
Autur
€
Mobil memiliki Kursi 6 dan roda Banyak
Pesawat memiliki roda Banyak dan bahan bakar Autur
BUILD SUCCESSFUL (total time: 0 seconds)
```

Windows Taskbar

Belajar - NetBeans IDE 8.0.2

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

Projects Services Files

Pesawat.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 package belajar;
7
8 /**
9  *
10 * @author Robby
11 */
12 public class Pesawat extends Kendaraan {
13     String bahanBakar = "Autur";
14     Kendaraan p = new Kendaraan();
15     String info;
16     void info(){
17         info = "Pesawat memiliki roda " + p.jumlahRoda + " dan bahan bakar " + bahanBakar;
18         System.out.println(info);
19     }
20 }
21
```

Pesawat - Navigator

Members <empty>

Pesawat :: Kendaraan

- info()
- bahanBakar : String
- info : String
- p : Kendaraan

Output

penjualanelektronik (run) #2 x Belajar (run) x

```
run:
Autur
€
Mobil memiliki Kursi 6 dan roda Banyak
Pesawat memiliki roda Banyak dan bahan bakar Autur
BUILD SUCCESSFUL (total time: 0 seconds)
```

Windows Taskbar

Tugas

DefaultModifier - NetBeans IDE 8.0.2

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

Search (Ctrl+F)

Projects Services Files

Source History <default config> <default config>

...ava Mobil.java Teknisija.java Pegawai.java YYYY.java Pesawat.java InheritanceTest.java InheritanceLatihan.java Persegi.java

Persegi.java

12 public class Persegi extends BangunDatar {
13 protected double sisi;
14
15 @Override
16 protected void hitungLuas(){
17 super.luas = sisi*sisi;
18 System.out.println("Luas bangun datar persegi : " + luas);
19 }
20 @Override
21 protected double hitungKeliling(){
22 super.keliling = 4*sisi;
23 System.out.println("Keliling bangun datar persegi" + keliling);
24 return keliling;
25 }
26 public static void main(String[] args) {
27 Persegi persegi = new Persegi();
28 persegi.sisi = 5;
29 persegi.hitungLuas();
30 persegi.hitungKeliling();
31 }
32 }

Members <empty>

Persegi :: BangunDatar
hitungKelling() : double
hitungLuas() : double
main(String[] args) : void
sisi : double

Find: ceta Previous Next

Output penjualanelektronik (run) #2 DefaultModifier (run) x

run:
Luas bangun datar persegi : 25.0
Keliling bangun datar persegi:10.0
BUILD SUCCESSFUL (total time: 3 seconds)

penjualanelektronik (run) #2 running... 31:6 10:00 15/11/2019

DefaultModifier - NetBeans IDE 8.0.2

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

Search (Ctrl+F)

Projects Services Files

Source History <default config> <default config>

...ava Pegawai.java YYYY.java Pesawat.java InheritanceTest.java InheritanceLatihan.java Persegi.java PersegiPanjang.java

PersegiPanjang.java

13 protected int panjang;
14 protected double lebar;
15
16 @Override
17 protected void hitungLuas(){
18 super.luas = panjang*lebar;
19 System.out.println("Luas bangun datar persegi panjang :" + luas);
20 }
21
22 @Override
23 protected double hitungKeliling(){
24 super.keliling = (2*panjang)+(2*lebar);
25 System.out.println("Keliling bangun datar persegi panjang :" + keliling);
26 return keliling;
27 }
28 public static void main(String[] args) {
29 PersegiPanjang pp = new PersegiPanjang();
30 pp.panjang = 15;
31 pp.lebar = 10;
32 pp.hitungLuas();
33 pp.hitungKeliling();
34 }
35 }

Members <empty>

PersegiPanjang :: BangunDatar
hitungKelling() : double
hitungLuas() : double
main(String[] args) : void
panjang : int
lebar : double

Find: ceta Previous Next

Output penjualanelektronik (run) #2 DefaultModifier (run) x

run:
Luas bangun datar persegi panjang :150.0
Keliling bangun datar persegi panjang :50.0
BUILD SUCCESSFUL (total time: 1 second)

penjualanelektronik (run) #2 running... 10:16 10:03 15/11/2019

DefaultModifier - NetBeans IDE 8.0.2

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

Source History Find: ceta

```

9      * @author Djum
10     */
11
12     public class Segitiga extends BangunDatar{
13         protected double alas ;
14         int tinggi ;
15
16         @Override
17         protected void hitungLuas() {
18             super.luas = 0.5*alas*tinggi;
19             System.out.println("Luas bangun datar segitiga :" + luas);
20         }
21
22         public static void main(String[] args) {
23             Segitiga sgt = new Segitiga();
24             sgt.tinggi = 15;
25             sgt.alas = 20;
26             sgt.hitungLuas();
27         }
28     }

```

Output

```

penjualanelektronik (run) #2 x DefaultModifier (run) x
run:
Luas bangun datar segitiga :150.0
BUILD SUCCESSFUL (total time: 1 second)

```

Finished building DefaultModifier (run).

DefaultModifier - NetBeans IDE 8.0.2

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

Source History Find: ceta

```

10    * @author Djum
11    */
12    public class SegitigaSamaKaki extends Segitiga {
13        protected double sisiMiring;
14        int alas;
15
16        @Override
17        protected double hitungKeliling(){
18            super.keliling = (2*sisiMiring) + alas;
19            System.out.println("Keliling bangun datar Segitiga Sama kaki :" + keliling);
20            return keliling;
21        }
22
23        public static void main(String[] args) {
24            SegitigaSamaKaki sgt = new SegitigaSamaKaki();
25            sgt.sisiMiring = 20;
26            sgt.alas = 10;
27            sgt.hitungKeliling();
28        }
29    }

```

Output

```

penjualanelektronik (run) #2 x DefaultModifier (run) x
run:
Keliling bangun datar Segitiga Sama kaki :50.0
BUILD SUCCESSFUL (total time: 1 second)

```

Finished building DefaultModifier (run).

DefaultModifier - NetBeans IDE 8.0.2

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

Search (Ctrl+F)

Projects Services Files <default config>

Source History

Apikasi Perjalanan Belajar DefaultModifier TugasInheritance

- BangunDatar.java
- Persegi.java
- PersegiPanjang.java
- Segitiga.java
- SegitigaSamaKaki.java
- SegitigaSamaSisi.java
- nop
- praktikum.pbo.package1
- Test Packages
- Libraries
- Test Libraries

Members <empty>

hitungKelling - Navigator

SegitigaSamaSisi :: Segitiga

- hitungKelling() : double
- main(String[] args)
- sisi : double

Find: ceta

Output

penjualanelektronik (run) #2 DefaultModifier (run) x

```

run:
Keiling bangun datar Segitiga Sama kaki :50.0
BUILD SUCCESSFUL (total time: 1 second)

```

penjualanelektronik (run) #2 running... 10:07 15/11/2019 15:13

Modul 7

bab7 - NetBeans IDE 8.0.2

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

Search (Ctrl+F)

Projects Services Files <default config>

Source History

bab7

- Source Packages
- bab7
- Karyawan.java
- KaryawanDemo.java
- Lahan.java
- Manager.java
- Test Packages
- Libraries
- Test Libraries
- Coba
- Coba
- DefaultModifier
- JavaApplication1
- Source Packages
- Databas
- CRUD.java
- InterfaceProgram.java
- KoneksiDatabase.java
- Program.java
- booking.sql
- PunkteKawan
- Admin.java
- booking.java
- home.java
- login.java
- formular
- gambar
- menu
- Libraries
- Modul4
- Modul5
- Modul6
- PraPBO
- Project bab7
- Source Packages
- Database
- Booking.sql
- CRUD.java
- InterfaceProgram.java
- KoneksiDatabase.java
- Program.java
- Gambar
- Index
- Libraries
- Test Packages
- Swing

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 bab7;
7
8 /**
9  * @author DJUNI-PC
10 */
11 public class Karyawan {
12     private String nama;
13     private float gaji;
14     private int usia;
15
16     public String getNama() {
17         return nama;
18     }
19
20     public void setNama(String nama) {
21         this.nama = nama;
22     }
23
24     public float getGaji() {
25         return gaji;
26     }
27
28     public void setGaji(float gaji) {
29         this.gaji = gaji;
30     }
31
32     public int getUsia() {
33         return usia;
34     }
35
36     public void setUsia(int usia) {
37         this.usia = usia;
38     }
39
40 }
41

```

40:2 35

bab7 - NetBeans IDE 8.0.2

```

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 bab7;
7
8  /**
9   * Author DJUN-PC
10  */
11 public class KaryawanDemo {
12     public static void main(String[] args) {
13         Karyawan k1 = new Karyawan();
14         k1.setNama("Djuna");
15         k1.setGaji(2500000);
16         k1.setUsia(21);
17
18         System.out.println(k1.getNama());
19         System.out.println(k1.getGaji());
20         System.out.println(k1.getUsia());
21     }
22 }

```

Output - bab7 (run) ×

- run:
- 4900000.0
- 21
- BUILD SUCCESSFUL (total time: 0 seconds)

23:2 INS

bab7 - NetBeans IDE 8.0.2

```

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 bab7;
7
8  /**
9   * Author DJUN-PC
10  */
11 public class Manager extends Karyawan {
12     private float jamKerja = 7.5f;
13
14     public void setjamKerja(float jamKerja) {
15         this.jamKerja = jamKerja;
16     }
17
18     public int jamKerja() {
19         return (int) jamKerja;
20     }
21
22     public float getGajiManager() {
23         return getGaji() * 2;
24     }
25 }

```

Output - bab7 (run) ×

26:2 INS

Latihan

bab7 - NetBeans IDE 8.0.2

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

Projects Services Files

bab7

Source Packages

- bab7
- Karyawan.java
- Karyawandemo.java
- Lathan.java
- Manager.java

Test Packages

Libraries

Test Libraries

Coba

DefaultModifier

JavaApplication1

Source Packages

- Database
- CRUD.java
- InterfaceProgram.java
- KoneksiDatabase.java
- Program.java
- booking.sql

Punakawan

- Admin.java
- Booking.java
- Home.java
- Login.java
- formular
- gambar
- manut

Libraries

Modul1

Modul5

Modul6

PrakPBO

Project PBO

Source Packages

- Database
- Booking.sql
- CRUD.java
- InterfaceProgram.java
- KoneksiDatabase.java
- Program.java
- gambar
- Index

Test Packages

Libraries

Test Libraries

Swing

Source

```
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  package bab7;
8
9 /**
10  * @author DJUN-PC
11  */
12
13 public class Lathan {
14     public static void main(String[] args) {
15         Manager a1 = new Manager();
16         Manager a2 = new Manager();
17         Manager a3 = new Manager();
18         Manager a4 = new Manager();
19         Manager a5 = new Manager();
20
21         a1.setNama("Djuni");
22         a1.setGaji(230000000);
23         a1.setUsia(28);
24         a1.setJmPerja(0.5f);
25
26         System.out.println(a1.getNama());
27         System.out.println(a1.getGaji());
28         System.out.println(a1.getUsia());
29         System.out.println(a1.getJmPerja());
30
31         a2.setNama("Rifqi");
32         a2.setGaji(270000000);
33         a2.setUsia(27);
34         a2.setJmPerja(0.5f);
35
36         System.out.println(a2.getNama());
37         System.out.println(a2.getGaji());
38         System.out.println(a2.getUsia());
39         System.out.println(a2.getJmPerja());
40
41         a3.setNama("Adity");
42         a3.setGaji(260000000);
43         a3.setUsia(23);
44         a3.setJmPerja(0.5f);
45
46         System.out.println(a3.getNama());
47         System.out.println(a3.getGaji());
48         System.out.println(a3.getUsia());
49         System.out.println(a3.getJmPerja());
50
51         a4.setNama("Mahandy");
52         a4.setGaji(300000000);
53         a4.setUsia(24);
54         a4.setJmPerja(0.5f);
55
56         System.out.println(a4.getNama());
57         System.out.println(a4.getGaji());
58         System.out.println(a4.getUsia());
59         System.out.println(a4.getJmPerja());
60
61         a5.setNama("Boy");
62         a5.setGaji(200000000);
63         a5.setUsia(20);
64         a5.setJmPerja(0.5f);
65
66         System.out.println(a5.getNama());
67         System.out.println(a5.getGaji());
68         System.out.println(a5.getUsia());
69         System.out.println(a5.getJmPerja());
70     }
71 }
```

68:29 165

bab7 - NetBeans IDE 8.0.2

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

Projects Services Files

bab7

Source Packages

- bab7
- Karyawan.java
- Karyawandemo.java
- Lathan.java
- Manager.java

Test Packages

Libraries

Test Libraries

Coba

DefaultModifier

JavaApplication1

Source Packages

- Database
- CRUD.java
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Punakawan

- Admin.java
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- Home.java
- Login.java
- formular
- gambar
- manut

Libraries

Modul4

Modul5

Modul6

PrakPBO

Project PBO

Source Packages

- Database
- Booking.sql
- CRUD.java
- InterfaceProgram.java
- KoneksiDatabase.java
- Program.java
- gambar
- Index

Test Packages

Libraries

Test Libraries

Swing

Source

```
24
25         System.out.println(a1.getNama());
26         System.out.println(a1.getGaji());
27         System.out.println(a1.getUsia());
28         System.out.println(a1.getJmPerja());
29
30         a2.setNama("Rifqi");
31         a2.setGaji(270000000);
32         a2.setUsia(27);
33         a2.setJmPerja(0.5f);
34
35         System.out.println(a2.getNama());
36         System.out.println(a2.getGaji());
37         System.out.println(a2.getUsia());
38         System.out.println(a2.getJmPerja());
39
40         a3.setNama("Adity");
41         a3.setGaji(260000000);
42         a3.setUsia(23);
43         a3.setJmPerja(0.5f);
44
45         System.out.println(a3.getNama());
46         System.out.println(a3.getGaji());
47         System.out.println(a3.getUsia());
48         System.out.println(a3.getJmPerja());
49
50         a4.setNama("Mahandy");
51         a4.setGaji(300000000);
52         a4.setUsia(24);
53         a4.setJmPerja(0.5f);
54
55         System.out.println(a4.getNama());
56         System.out.println(a4.getGaji());
57         System.out.println(a4.getUsia());
58         System.out.println(a4.getJmPerja());
59
60         a5.setNama("Boy");
61         a5.setGaji(200000000);
62         a5.setUsia(20);
63         a5.setJmPerja(0.5f);
64
65         System.out.println(a5.getNama());
66         System.out.println(a5.getGaji());
67         System.out.println(a5.getUsia());
68         System.out.println(a5.getJmPerja());
69
70     }
71 }
```

68:29 165

```

System.out.println(ai.getName());
System.out.println(ai.getGaji());
System.out.println(ai.getGenset());
System.out.println(ai.getGajilManager());
a2.setName("Rifqi");
a2.setGaji(270000000);
a2.setUraia(27);
a2.setJamkerja(8.5f);

```

Output - bab7 (run) *

```

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

```

MODUL 8

1. Parentclaz.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.
 */
package Polymorphism;

```

```

/**
 *
 * @author DJUM-PC
 */
class Parentclaz {
    void printOut(){
        System.out.println("Ini adalah Superclass");
    }
}

```

2. Childclaz.java

The screenshot shows a Java IDE interface with multiple tabs at the top. The active tab is 'Childclaz.java'. The code editor contains the following 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 Polymorphism;
7
8  /**
9   * 
10  * @author DJUN-PC
11  */
12 class Childclaz extends Parentclaz{
13     void printout(){
14         System.out.println("Ini adalah Subclass");
15     }
16     void hello(){
17         System.out.println("Hello World");
18     }
19 }
20
```

3. DemoOverriding.java

The screenshot shows a Java IDE interface with multiple tabs at the top. The active tab is 'DemoOverriding.java'. The code editor contains the following 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 Polymorphism;
7
8  /**
9   * 
10  * @author DJUN-PC
11  */
12 class DemoOverriding {
13     public static void main(String[] args){
14         Parentclaz pc = new Parentclaz();
15         Childclaz cc = new Childclaz();
16         pc.printout();
17         cc.printout();
18     }
19 }
20
```

Below the code editor is an 'Output' window titled 'ModulB8 (run) x'. It displays the following text:

```
run:
Ini adalah Superclass
Ini adalah Subclass
BUILD SUCCESSFUL (total time: 0 seconds)
```

4. Hewan.java

The screenshot shows the NetBeans IDE interface with the Hewan.java file open in the editor. The code defines a class Hewan with a jalan() method that prints "Hewan bisa berjalan". The code 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 Polymorphism;
7
8  /**
9  * @author DJUM-PC
10 */
11 public class Hewan {
12     public void jalan(){
13         System.out.println("Hewan bisa berjalan");
14     }
15 }
16
17
```

The status bar at the bottom indicates "Modull8 - NetBeans IDE 8.0.2" and the time "16:21".

5. Kucing.java

The screenshot shows the NetBeans IDE interface with the Kucing.java file open in the editor. The code defines a class Kucing that extends Hewan and overrides the jalan() method to print "Kucing bisa berjalan dengan " + "dan berlari". The code 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 Polymorphism;
7
8  /**
9  * @author DJUM-PC
10 */
11 public class Kucing extends Hewan {
12     public void jalan(){
13         System.out.println("Kucing bisa berjalan dengan " + "dan berlari");
14     }
15 }
16
17
```

The status bar at the bottom indicates "Modull8 - NetBeans IDE 8.0.2" and the time "10:19".

6. Sepeda.java

The screenshot shows a Java IDE interface with multiple tabs at the top. The active tab is 'Sepeda.java'. The code in the editor is:

```
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 Polymorphism;
7
8  /**
9  *
10 * @author DJUM-PC
11 */
12 class Sepeda {
13     void run(){
14         System.out.println("Bisa Berjalan");
15     }
16 }
17
```

7. SepedaAir.java

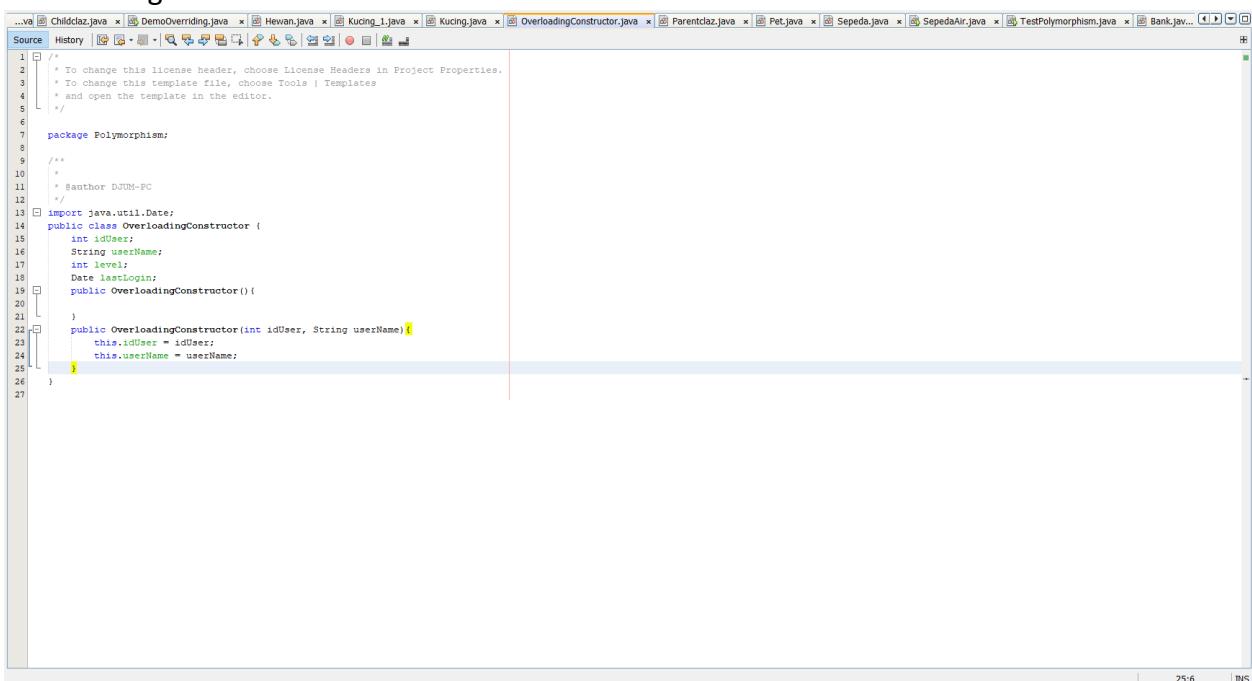
The screenshot shows a Java IDE interface with multiple tabs at the top. The active tab is 'SepedaAir.java'. The code in the editor is:

```
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 Polymorphism;
7
8  /**
9  *
10 * @author DJUM-PC
11 */
12 class SepedaAir extends Sepeda{
13     void run(){
14         System.out.println("Hanya bisa berjalan di atas " + "Air");
15     }
16     public static void main(String[] args){
17         Sepeda s = new SepedaAir();
18         s.run();
19     }
20 }
21
```

In the bottom right corner, there is an 'Output' window showing the results of a build or run command:

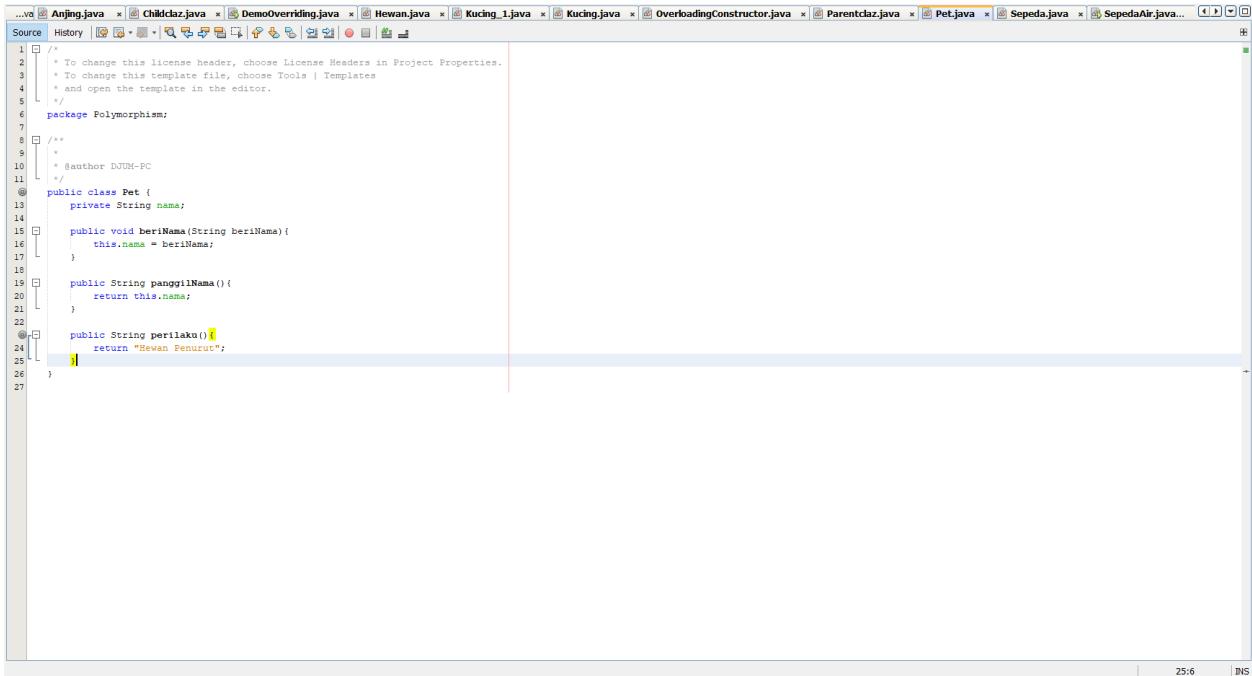
```
run:
Hanya bisa berjalan di atas Air
BUILD SUCCESSFUL (total time: 0 seconds)
```

8. Overloading



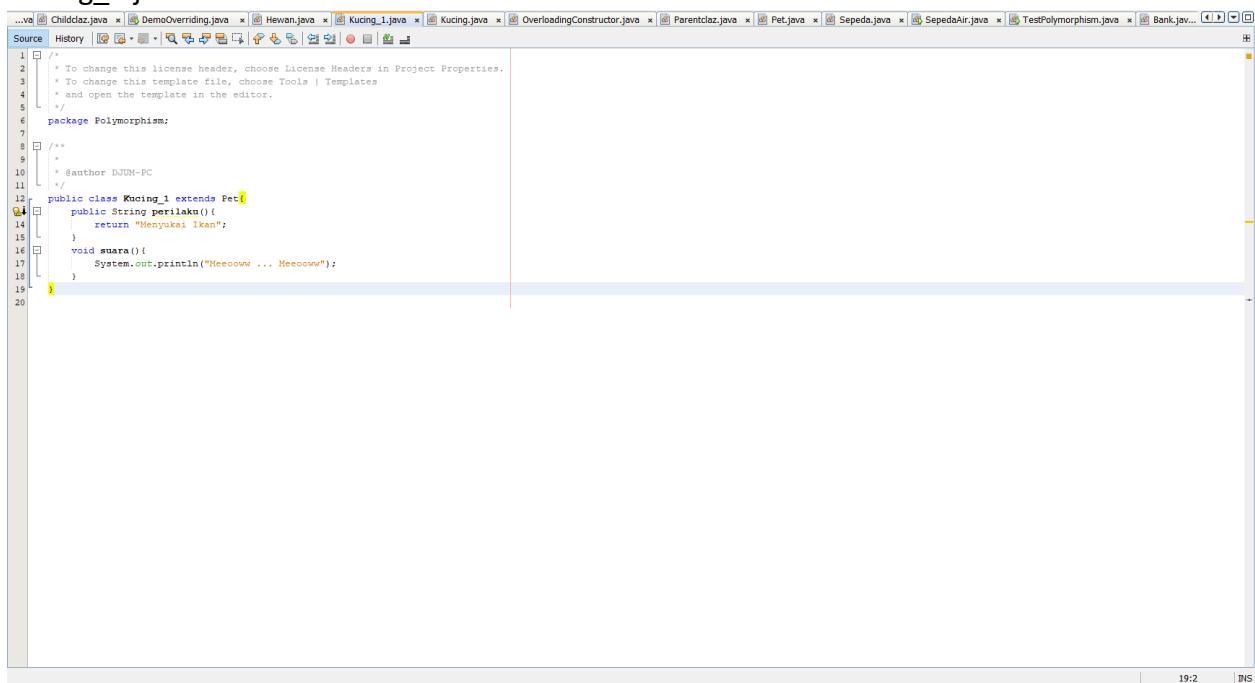
```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6
7 package Polymorphism;
8
9 /**
10 * @author DJUM-PC
11 */
12
13 import java.util.Date;
14 public class OverloadingConstructor {
15     int idUser;
16     String userName;
17     int level;
18     Date lastLogin;
19     public OverloadingConstructor() {
20     }
21     public OverloadingConstructor(int idUser, String userName) {
22         this.idUser = idUser;
23         this.userName = userName;
24     }
25 }
26
27
```

9. Pet.java



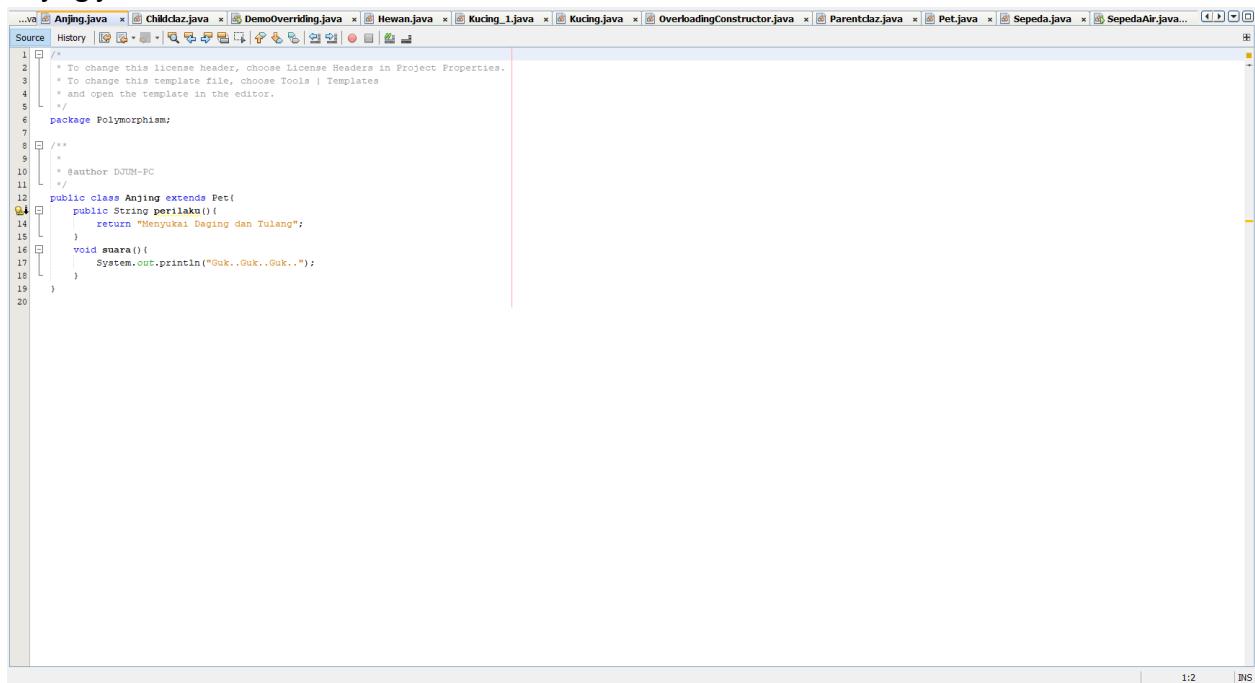
```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6
7 package Polymorphism;
8
9 /**
10 * @author DJUM-PC
11 */
12
13 public class Pet {
14     private String name;
15     public void beriNama(String beriNama) {
16         this.name = beriNama;
17     }
18     public String panggilNama() {
19         return this.name;
20     }
21     public String perilaku() {
22         return "Hewan Penurut";
23     }
24 }
25
26
27
```

10. Kucing_1.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 Polymorphism;
6
7 /**
8  *
9  * @author DJUN-PC
10 */
11 public class Kucing_1 extends Pet{
12     public String perilaku(){
13         return "Menyukai Ikan";
14     }
15     void suara(){
16         System.out.println("Meoooo... Meooooo!");
17     }
18 }
19
20
```

11. Anjing.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 Polymorphism;
6
7 /**
8  *
9  * @author DJUN-PC
10 */
11 public class Anjing extends Pet{
12     public String perilaku(){
13         return "Menjukai Daging dan Tulang";
14     }
15     void suara(){
16         System.out.println("Guk..Guk..Guk..");
17     }
18 }
19
20
```

12. TestPolymorphism.java

The screenshot shows the Eclipse IDE interface with the TestPolymorphism.java file open in the editor. The code defines two classes, Kucing_1 and Anjing, which implement a common interface or base class. The main method creates instances of both and calls their methods. The output window shows the expected results for each animal's behavior.

```
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 Polymorphism;  
7  
8 /**  
 * @author DJUM-PC  
10 */  
11 public class TestPolymorphism {  
12     public static void main(String[] args){  
13         Kucing_1 kcl = new Kucing_1();  
14         Anjing aj= new Anjing();  
15  
16         kcl.beriNama("TOM");  
17         System.out.println(kcl.panggilNama());  
18         System.out.println(kcl.perilaku());  
19         kcl.suara();  
20  
21         aj.beriNama("BULL");  
22         System.out.println(aj.panggilNama());  
23         System.out.println(aj.perilaku());  
24         aj.suara();  
25     }  
26 }  
27  
28  
Output - ModulB (run) [ ]  
run:  
TOM  
Menyukai Ikan  
Mencuci ... Meecoww  
BULL  
Menyukai Daging dan Tulang  
Guk..Guk..Guk..  
BUILD SUCCESSFUL (total time: 0 seconds)
```

13. Elang.java

The screenshot shows the Eclipse IDE interface with the Elang.java file open in the editor. The code defines a single method named jalani() which prints a specific message. The code is currently incomplete, with the closing brace for the method body missing.

```
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 /**  
 * @author DJUM-PC  
10 */  
11 public class Elang {  
12     void jalani(){  
13         System.out.println("Hewan yang bisa Terbang");  
14     }  
15 }  
16  
17
```

14. CustomerData.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 TUGAS;
6
7  /**
8  *
9  * @author DJUM-PC
10 */
11 public class CustomerData {
12     String nama, alamat, tanggalLahir, pekerjaan;
13     double gaji;
14
15     public CustomerData() {
16         System.out.println("Data Customer");
17     }
18
19     public CustomerData(String nama, double gaji) {
20         this.nama = nama;
21         this.gaji = gaji;
22         System.out.println("Nama anda " + nama + "\n" +
23                           "Gaji = Rp. " + gaji + "\n");
24     }
25
26 }
```

15. DemoCustomerData.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 TUGAS;
6
7  /**
8  *
9  * @author DJUM-PC
10 */
11
12 public class DemoCustomerData {
13     public static void main(String[] args) {
14         CustomerData cd1 = new CustomerData("Amron", 500000);
15         CustomerData cd2 = new CustomerData("Niplon", 1000000);
16         CustomerData cd3 = new CustomerData("Djum", 750000);
17         CustomerData cd4 = new CustomerData("Wawa", 450000);
18         CustomerData cd5 = new CustomerData("Wawi", 550000);
19         CustomerData cd6 = new CustomerData("Waluyo", 400000);
20         CustomerData cd7 = new CustomerData("Boby", 500000);
21         CustomerData cd8 = new CustomerData("Bobi", 650000);
22         CustomerData cd9 = new CustomerData("Ruy", 950000);
23         CustomerData cd10 = new CustomerData("COC", 350000);
24     }
25 }
```

Output - Modul8 (run) :

```
Gaji = Rp. 1000000.0
Nama anda Djum
Gaji = Rp. 750000.0
Nama anda Wawa
Gaji = Rp. 450000.0
Nama anda Wawi
Gaji = Rp. 550000.0
Nama anda Waluyo
Gaji = Rp. 400000.0
Nama anda Boby
Gaji = Rp. 500000.0
Nama anda Bobi
Gaji = Rp. 650000.0
Nama anda Ruy
Gaji = Rp. 950000.0
Nama anda COC
Gaji = Rp. 350000.0
```

16. Bank.java

The screenshot shows a Java IDE interface with multiple tabs at the top. The active tab is 'Bank.java'. The code in the editor 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 TUGAS;
7
8 /**
9 *
10 * @author DJUM-PC
11 */
12 public class Bank {
13     int rasio;
14
15     protected int rasioBunga(){
16         return rasio;
17     }
18 }
```

The code defines a class named 'Bank' with a private attribute 'rasio' and a protected method 'rasioBunga()' that returns the value of 'rasio'.

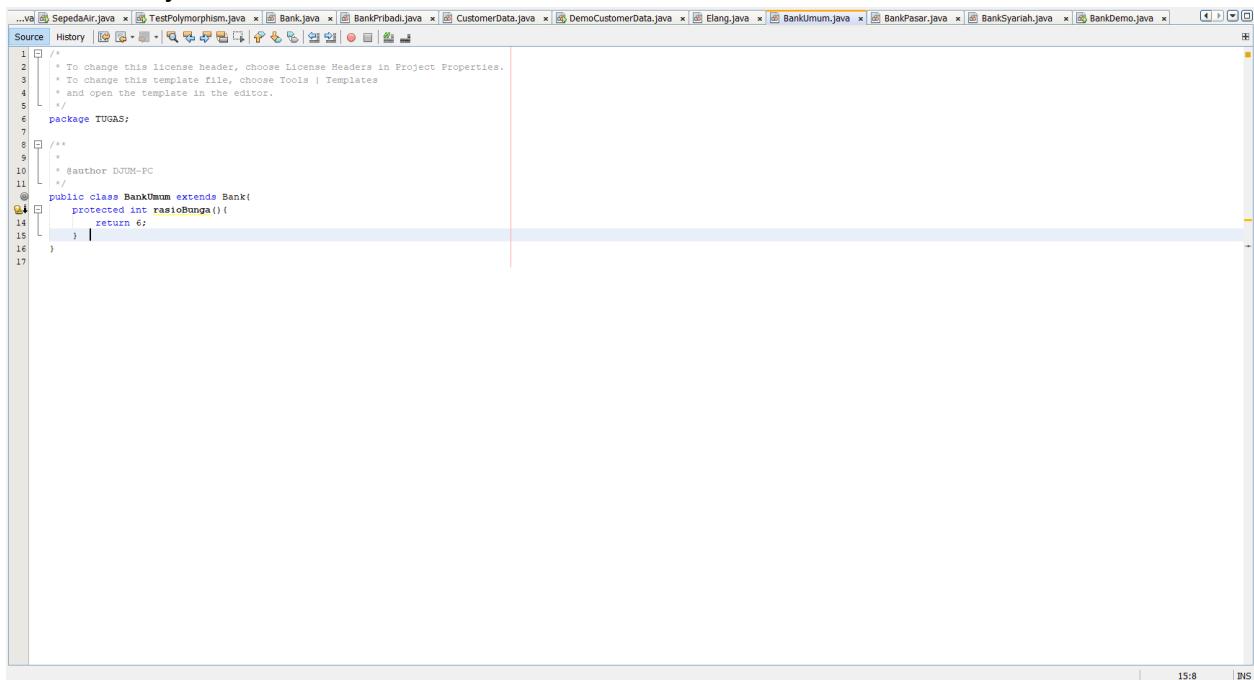
17. BankPribadi.java

The screenshot shows a Java IDE interface with multiple tabs at the top. The active tab is 'BankPribadi.java'. The code in the editor 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 TUGAS;
7
8 /**
9 *
10 * @author DJUM-PC
11 */
12 public class BankPribadi extends Bank{
13
14     protected int rasioBunga(){
15         return 7;
16     }
17 }
```

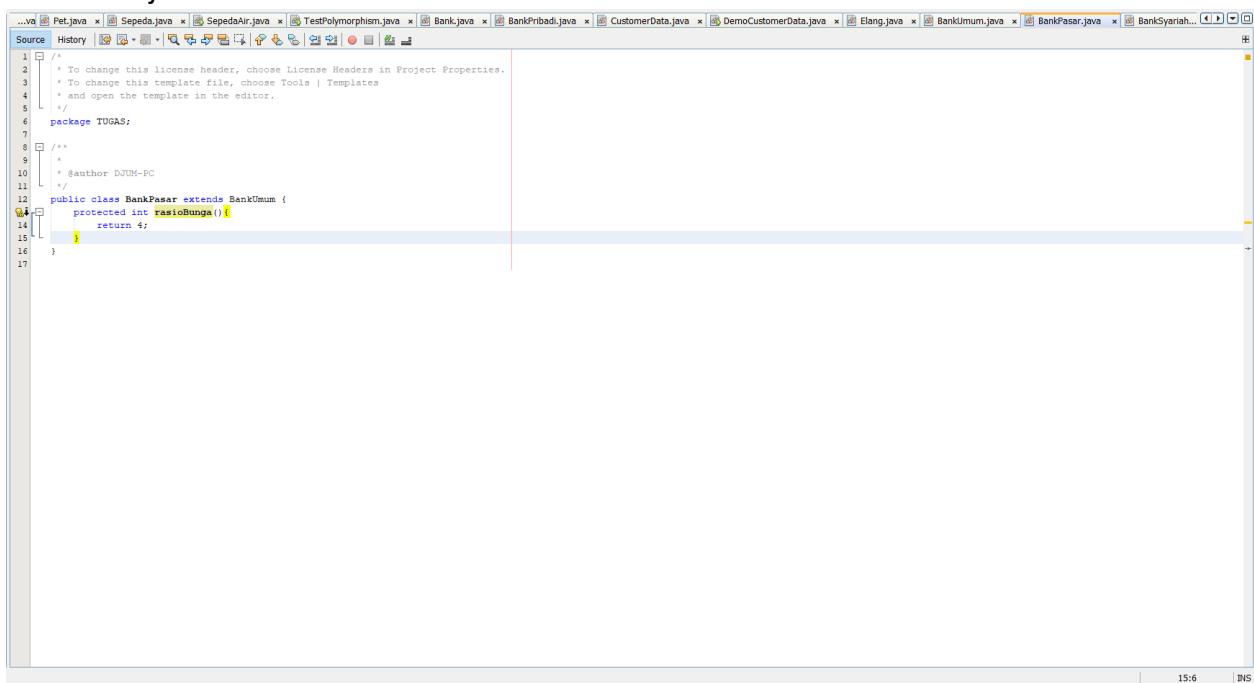
The code defines a class named 'BankPribadi' that extends the 'Bank' class. It overrides the 'rasioBunga()' method to return a fixed value of 7.

18. BankUmum.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 package TUGAS;
7
8 /**
9  *
10 * @author DJUM-PC
11 */
12 public class BankUmum extends Bank{
13     protected int rasioBunga();
14     {
15         return 6;
16     }
17 }
```

19. BankPasar.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 package TUGAS;
7
8 /**
9  *
10 * @author DJUM-PC
11 */
12 public class BankPasar extends BankUmum {
13     protected int rasioBunga();
14     {
15         return 4;
16     }
17 }
```

20. BankSyariah.java

The screenshot shows a Java IDE interface with multiple tabs at the top. The active tab is 'BankSyariah.java'. The code editor contains the following 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 TUGAS;
7
8  /**
9   * 
10  * @author DJUM-PC
11  */
12 public class BankSyariah extends BankUmmum {
13     protected int rasioBunga(){
14         return 5;
15     }
16 }
17
```

21. BankDemo.java

The screenshot shows a Java IDE interface with multiple tabs at the top. The active tab is 'BankDemo.java'. The code editor contains the following Java code:

```
1  /*
2   * 
3   * @author DJUM-PC
4   */
5  public class BankDemo {
6      public static void main(String[] args){
7          Bank B1 = new BankPribadi();
8          Bank B2 = new BankUmmum();
9
10         System.out.println(
11             "Bank Pribadi : " + B1.rasioBunga() + "\n" +
12             "Bank Ummum : " + B2.rasioBunga() + "\n");
13
14         BankUmmum B3 = new BankPaser();
15         BankUmmum B4 = new BankSyariah();
16
17         System.out.println(
18             "Bank Paser : " + B3.rasioBunga() + "\n"
19             + "Bank Syariah : " + B4.rasioBunga());
20     }
21 }
22
23
24
25
26
27
28
29
```

Below the code editor, there is an 'Output - ModulB (run)' window showing the execution results:

```
run:
Bank Pribadi : 7
Bank Ummum : 6
Bank Paser : 4
Bank Syariah : 5
BUILD SUCCESSFUL (total time: 0 seconds)
```

MODUL 9

Latihan

```
methodAbstract.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 package Contoh;
7
8 /**
9  * @author DJUM-PC
10 */
11 public abstract class methodAbstract {
12     public abstract int luas();
13     public abstract int keliling();
14
15     public int getLuas(){
16         return luas();
17     }
18     public int getKell(){
19         return keliling();
20     }
21 }
22
23
```

```
JajarGenjang.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 package Latihan;
7 import Contoh.methodAbstract;
8
9 /**
10  * @author DJUM-PC
11 */
12 public class JajarGenjang extends methodAbstract{
13     int alas = 20;
14     int tinggi = 15;
15     int b = 17;
16
17     public int luas(){
18         return alas*tinggi;
19     }
20     public int keliling(){
21         return 2*(alas+b);
22     }
23 }
```

```
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 Latihan;
7  import Contoh.methodAbstract;
8  /*
9   * @author DJUM-PC
10  */
11 public class Lingkaran extends methodAbstract{
12     int r = 14;
13     int phi = 22/7;
14
15     public int luas(){
16         return phi*r*r;
17     }
18     public int keliling(){
19         return 2*phi*r;
20     }
21
22 }
23
24
```



```
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 Latihan;
7  import Contoh.methodAbstract;
8
9  /*
10  * @author DJUM-PC
11  */
12 public class PersegiPanjang extends methodAbstract{
13     int panjang = 12;
14     int lebar = 7;
15
16     public int luas(){
17         return panjang*lebar;
18     }
19     public int keliling(){
20         return 2*(panjang+lebar);
21     }
22
23 }
24
```

Java code editor showing the `Segitiga.java` file:

```
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 Latihan;
7 import Contoh.methodAbstract;
8 /**
9 *
10 * @author DJNM-PC
11 */
12 public class Segitiga extends methodAbstract{
13     int a = 4;
14     int b = 3;
15     int c = 5;
16     int tinggi = 3;
17
18     public int luas(){
19         return a*tinggi/2;
20     }
21     public int keliling(){
22         return a+b+c;
23     }
24 }
```

Java code editor showing the `Demo.java` file:

```
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 Latihan;
7 /**
8 *
9 *
10 * @author DJNM-PC
11 */
12 public class Demo {
13     public static void main(String[] args){
14         PersegiPanjang pp = new PersegiPanjang();
15         System.out.println("Persegi Panjang");
16         System.out.println("Keliling = " + pp.getKell());
17         System.out.println("Luas = " + pp.getLuas() + "\n");
18
19         JajarGenjang jg = new JajarGenjang();
20         System.out.println("Jajar Genjang");
21         System.out.println("Keliling = " + jg.getKell());
22         System.out.println("Luas = " + jg.getLuas() + "\n");
23
24         Lingkaran lk = new Lingkaran();
25         System.out.println("Lingkaran");
26         System.out.println("Keliling = " + lk.getKell());
27         System.out.println("Luas = " + lk.getLuas() + "\n");
28
29         Segitiga sg = new Segitiga();
30         System.out.println("Segitiga");
31         System.out.println("Keliling = " + sg.getKell());
32         System.out.println("Luas = " + sg.getLuas() + "\n");
33     }
34 }
```

The screenshot shows a Java development environment with the following details:

Source - Demo.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  package Latihan;
7  /**
8   * @author DJUM-PC
9   */
10 public class Demo {
11     public static void main(String[] args) {
12         PersegiPanjang pp = new PersegiPanjang();
13         System.out.println("Persegi Panjang");
14         System.out.println("Kelling = " + pp.getKell());
15         System.out.println("Luas = " + pp.getLuas() + "\n");
16
17         JajarGenjang jg = new JajarGenjang();
18         System.out.println("Jajar Genjang");
19     }
}

```

Output - Modul9 (run) x

```

run:
Persegi Panjang
Kelling = 38
Luas = 84

Jajar Genjang
Kelling = 74
Luas = 300

Lingkaran
Kelling = 94
Luas = 550

Segitiga
Kelling = 12
Luas = 6

BUILD SUCCESSFUL (total time: 1 second)

```

Tugas

The screenshot shows a Java development environment with the following details:

Source - Tugas.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  package Tugas;
7
8  /**
9   * @author DJUM-PC
10  */
11 public abstract class BangunRuang {
12     public abstract float volume();
13     public abstract float luasPermukaan();
14
15     public float getVolume() {
16         return volume();
17     }
18
19     public float getLP() {
20         return luasPermukaan();
21     }
22 }

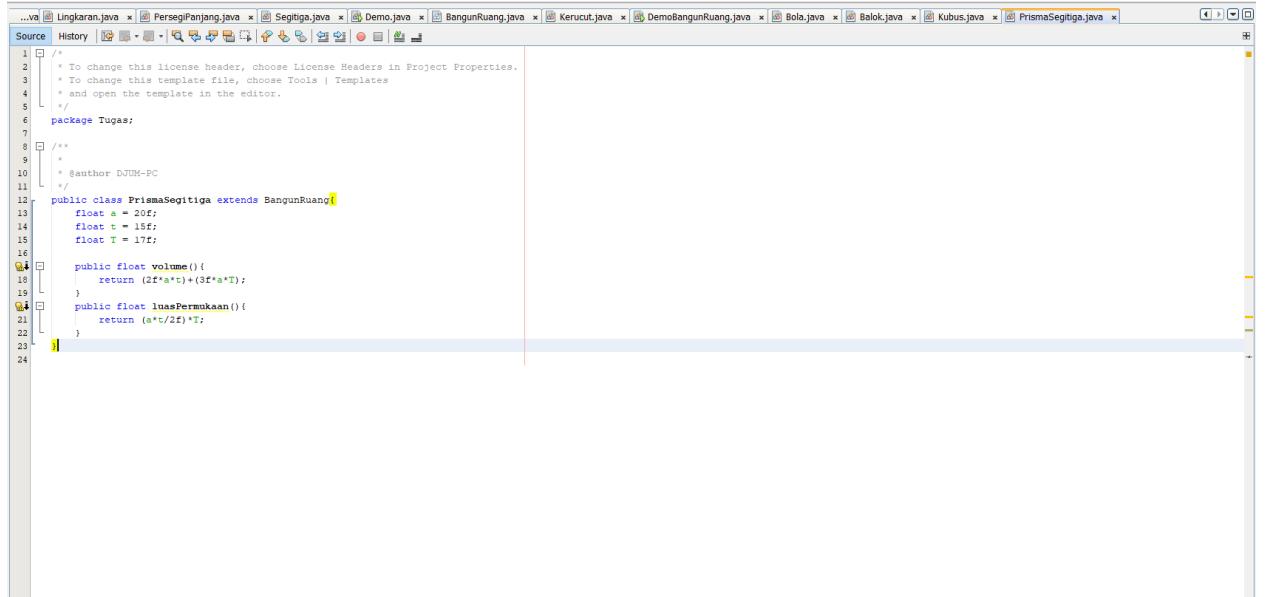
```

```
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  /**
9   * @author DJUM-PC
10  */
11 public class Balok extends BangunRuang{
12     float panjang = 10f;
13     float lebar = 7f;
14     float tinggi = 12f;
15
16     public float volume(){
17         return panjang*lebar*tinggi;
18     }
19     public float luasPermukaan(){
20         return ((2f*panjang*lebar)+(2f*panjang*tinggi)+(2f*lebar*tinggi));
21     }
22 }
23
24
```

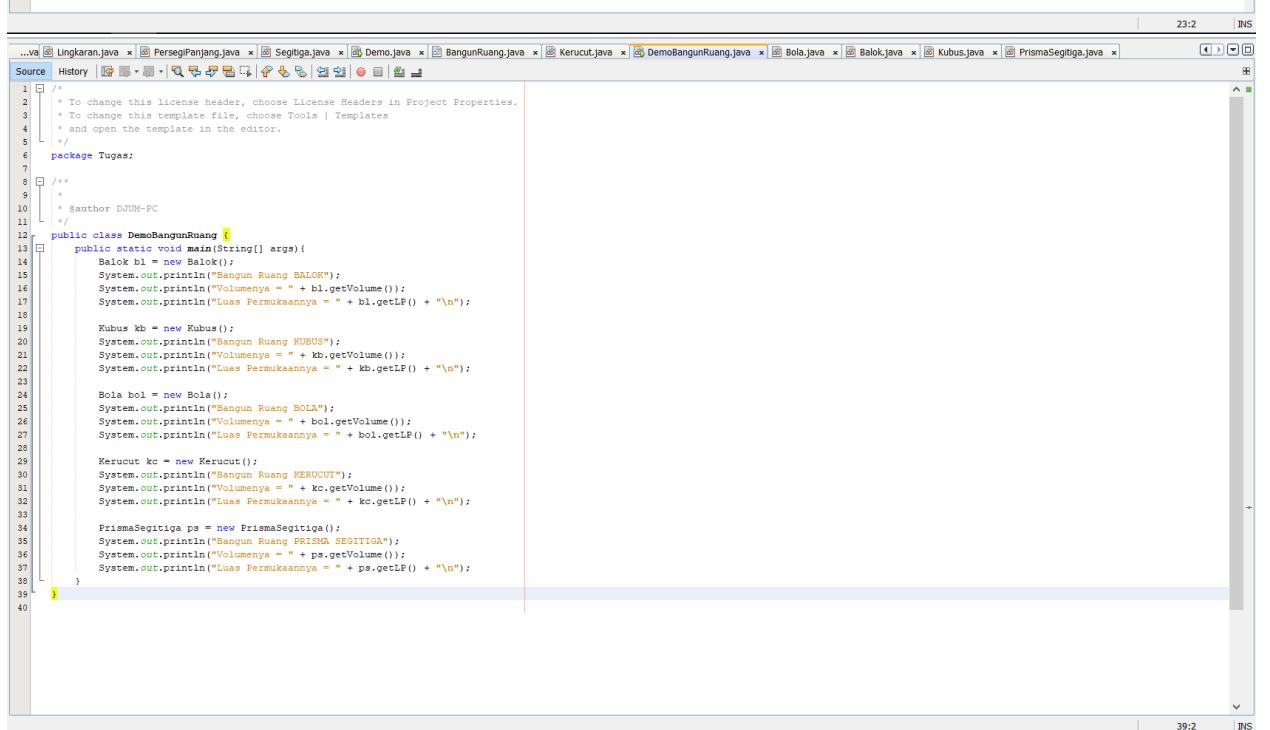
```
1  /*
2   * To change this license header, choose License Headers in Project Properties.
3   * To change this template file, choose Tools | Templates
4   * and open the template in the editor.
5   */
6  package Tugas;
7
8  /**
9   * @author DJUM-PC
10  */
11 public class Bola extends BangunRuang{
12     float r = 28f;
13     float phi = 22/7f;
14
15     public float volume(){
16         return 4/3f*phi*r*r*r;
17     }
18     public float luasPermukaan(){
19         return 4f*phi*r*r;
20     }
21 }
22
23
```

```
...vo Lingkaran.java x PersegiPanjang.java x Segitiga.java x Demo.java x BangunRuang.java x Kerucut.java x DemoBangunRuang.java x Bola.java x Balok.java x Kubus.java x PrismaSegitiga.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 Tugas;
7
8 /**
9  *
10 * @author DJUM-PC
11 */
12 public class Kerucut extends BangunRuang{
13     float r = 8f;
14     float s = 10f;
15     float t = 5f;
16     float phi = 22/7f;
17
18     public float volume(){
19         return (1/3f)*(phi*r*r*t);
20     }
21     public float luasPermukaan(){
22         return (phi*r*s)+(phi*r*t);
23     }
24
25
26
```

```
...vo Lingkaran.java x PersegiPanjang.java x Segitiga.java x Demo.java x BangunRuang.java x Kerucut.java x DemoBangunRuang.java x Bola.java x Balok.java x Kubus.java x PrismaSegitiga.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 Tugas;
7
8 /**
9  *
10 * @author DJUM-PC
11 */
12 public class Kubus extends BangunRuang{
13     float sisi = 8f;
14
15     public float volume(){
16         return sisi*sisi*sisi;
17     }
18     public float luasPermukaan(){
19         return (6*(sisi*sisi));
20     }
21
22
```



```
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 /**  
9  * @author DJUM-PC  
10 */  
11  
12 public class PrismaSegitiga extends BangunRuang {  
13     float a = 20f;  
14     float t = 15f;  
15     float T = 17f;  
16  
17     public float volume(){  
18         return (2f*a*t)+(3f*a*T);  
19     }  
20     public float luasPermukaan(){  
21         return (a*t/2f)*T;  
22     }  
23 }  
24
```



```
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 /**  
9  * @author DJUM-PC  
10 */  
11  
12 public class DemoBangunRuang {  
13     public static void main(String[] args){  
14         Balok bl = new Balok();  
15         System.out.println("Bangun Ruang BALOK");  
16         System.out.println("Volumenya = " + bl.getVolume());  
17         System.out.println("Luas Permukaannya = " + bl.getLP() + "\n");  
18  
19         Kubus kb = new Kubus();  
20         System.out.println("Bangun Ruang KUBUS");  
21         System.out.println("Volumenya = " + kb.getVolume());  
22         System.out.println("Luas Permukaannya = " + kb.getLP() + "\n");  
23  
24         Bola bol = new Bola();  
25         System.out.println("Bangun Ruang BOLA");  
26         System.out.println("Volumenya = " + bol.getVolume());  
27         System.out.println("Luas Permukaannya = " + bol.getLP() + "\n");  
28  
29         Kerucut kc = new Kerucut();  
30         System.out.println("Bangun Ruang KERUCUT");  
31         System.out.println("Volumenya = " + kc.getVolume());  
32         System.out.println("Luas Permukaannya = " + kc.getLP() + "\n");  
33  
34         PrismaSegitiga ps = new PrismaSegitiga();  
35         System.out.println("Bangun Ruang PRISMA SEGITIGA");  
36         System.out.println("Volumenya = " + ps.getVolume());  
37         System.out.println("Luas Permukaannya = " + ps.getLP() + "\n");  
38     }  
39 }  
40
```

The screenshot shows the NetBeans IDE interface with several tabs open at the top: Lingkaran.java, PersegiPanjang.java, Segitiga.java, Demo.java, BengunRuang.java, Kerucut.java, DemoBangunRuang.java, Bola.java, Balok.java, Kubus.java, and PrismaSegitiga.java. The main editor window displays Java code for a class named DemoBangunRuang. The code includes imports for java.util.Scanner and java.lang.Math, a package declaration for Tugas, and a main method that creates a Balok object and prints its volume and surface area. Below the code, the Output window shows the results of running the program, listing the volumes and surface areas for various shapes: BALOK, KUBUS, BOLA, and PRISMA SEGITIGA.

```

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 /**
9  * @author DJURN-PC
10 */
11 public class DemoBangunRuang {
12     public static void main(String[] args) {
13         Balok bl = new Balok();
14         System.out.println("Bangun Ruang BILANGAN");

```

Output - Modul9 (run) ×

```

run:
Bangun Ruang BALOK
Volumenya = 840.0
Luas Permukaannya = 548.0

Bangun Ruang KUBUS
Volumenya = 512.0
Luas Permukaannya = 384.0

Bangun Ruang BOLA
Volumenya = 91895.396
Luas Permukaannya = 9856.0

Bangun Ruang KERUCUT
Volumenya = 335.2381
Luas Permukaannya = 452.5714

Bangun Ruang PRISMA SEGITIGA
Volumenya = 1420.0
Luas Permukaannya = 2580.0

BUILD SUCCESSFUL (total time: 1 second)
|
```

MODUL 10

10.1. DEKLARASI INTERFACE

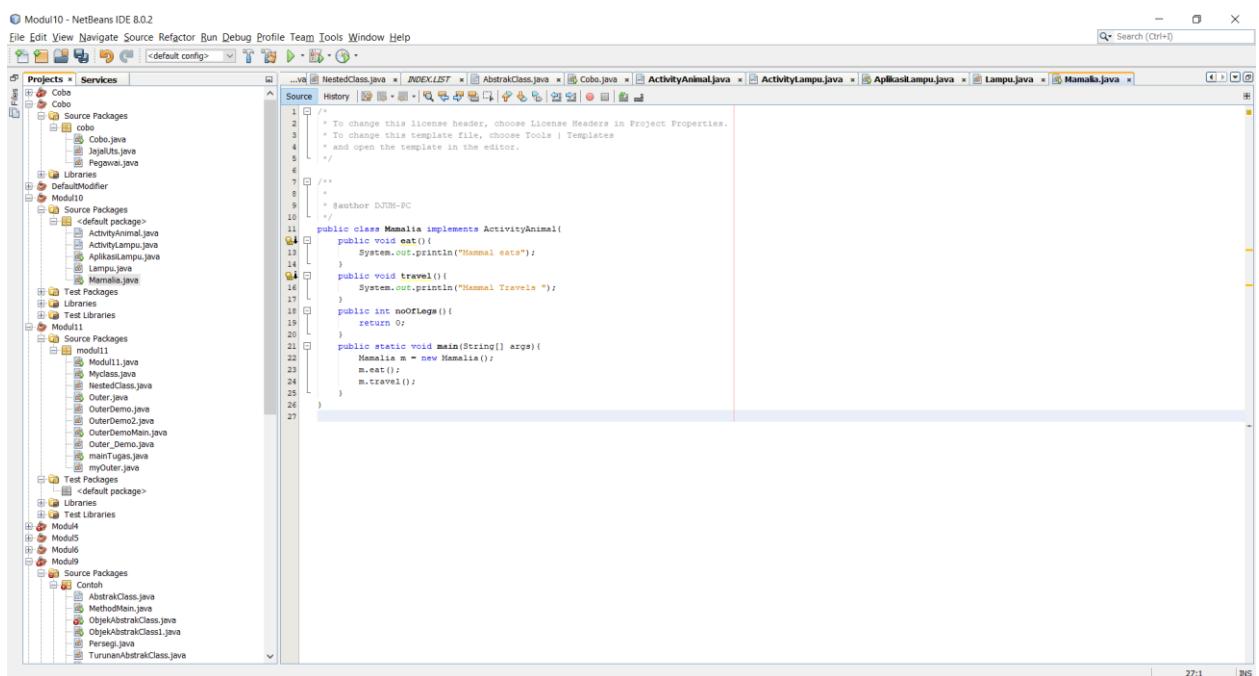
The screenshot shows the NetBeans IDE interface with several tabs open at the top: NestecClass.java, INDEX.LIST, AbstrakClass.java, Cobo.java, ActivityAnimal.java, ActivityLampu.java, AplikasiLampu.java, Lampu.java, and Mammala.java. The main editor window displays Java code for a class named ActivityAnimal. The code includes imports for java.util.Scanner and java.lang.Math, a package declaration for <default package>, and an interface definition for ActivityAnimal with methods eat() and travel().

```

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 DJURN-PC
9  */
10 public interface ActivityAnimal {
11     public void eat();
12     public void travel();
13 }
14
15

```

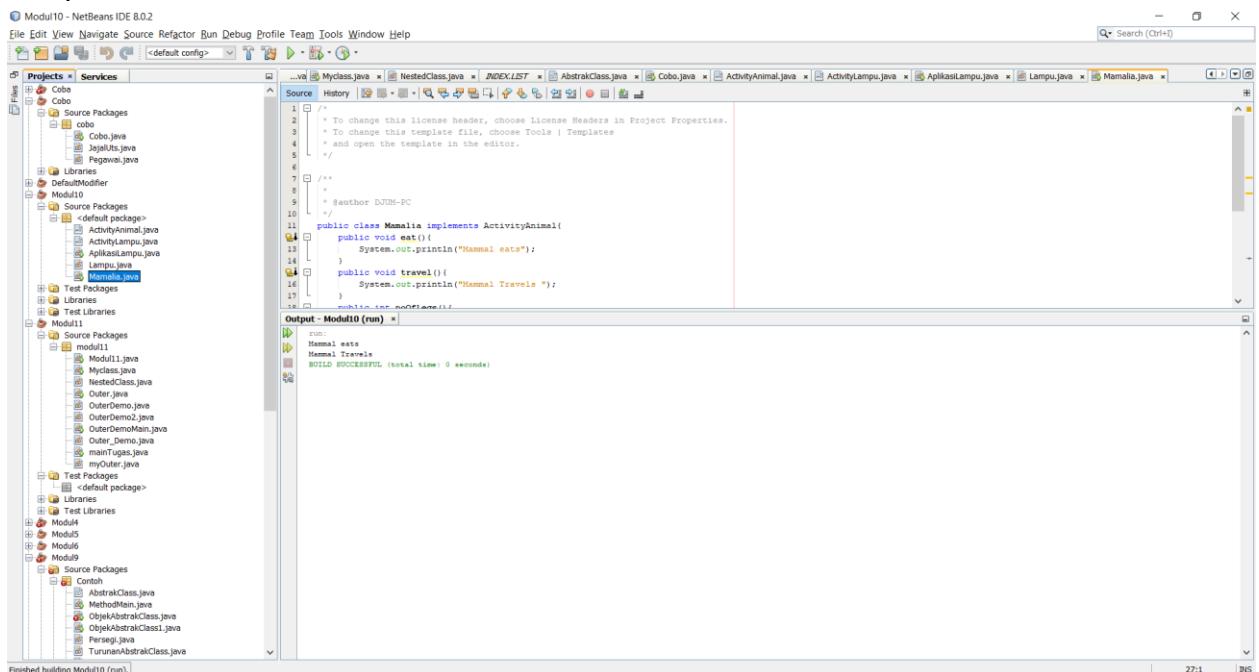
10.2. IMPLEMENTASI INTERFACE



The screenshot shows the NetBeans IDE interface with the project 'Modul10' open. The left pane displays the project structure with packages like Cobo, Modul10, and Modul11. The right pane shows the source code for the file 'Mammalia.java'. The code implements the 'ActivityAnimal' interface with methods 'eat()' and 'travel()'. It also includes a static main method to create and print output.

```
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 DJOH-PC
9 */
10 public class Mammalia implements ActivityAnimal{
11     public void eat(){
12         System.out.println("Mammal eats");
13     }
14     public void travel(){
15         System.out.println("Mammal Travels ");
16     }
17     public int noOfLegs(){
18         return 0;
19     }
20     public static void main(String[] args){
21         Mammalia m = new Mammalia();
22         m.eat();
23         m.travel();
24     }
25 }
26
27
```

Output :



The screenshot shows the NetBeans IDE interface with the project 'Modul10' open. The left pane displays the project structure. The right pane shows the source code for 'Mammalia.java' and the output window for 'Modul10 (run)'. The output window shows the program's execution: it prints 'Mammal eats' and 'Mammal Travels', followed by a success message.

```
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 DJOH-PC
9 */
10 public class Mammalia implements ActivityAnimal{
11     public void eat(){
12         System.out.println("Mammal eats");
13     }
14     public void travel(){
15         System.out.println("Mammal Travels ");
16     }
17     public int noOfLegs(){
18         return 0;
19     }
20 }
21
22 run:
23 Mammal eats
24 Mammal Travels
25 BUILD SUCCESSFUL (total time: 0 seconds)
```

TUGAS

Modul10 - NetBeans IDE 8.0.2

```
Source History Search (Ctrl+F) ...v1 NestledClass.java INDEX.LIST AbstractClass.java Cobo.java ActivityAnimal.java ActivityLampu.java AplikasiLampu.java Lampu.java Mammalia.java
```

Projects Services

Cobo

- Source Packages
 - cobo
 - Cobo.java
 - Jayabulta.java
 - Pegwaja.java
- Libraries
- DefaultModifier
- Modul10

 - Source Packages
 - <default package>
 - ActivityAnimal.java
 - ActivityLampu.java
 - AplikasiLampu.java
 - Lampu.java
 - Mammalia.java
 - Test Packages
 - Test Libraries

- Modul11

 - Source Packages
 - modul11
 - Modul11.java
 - MyCobo.java
 - NestedClass.java
 - Outer.java
 - OuterDemo.java
 - OuterDemo2.java
 - OuterDemoMain.java
 - OuterDemoMy.java
 - myOuter.java
 - Test Packages
 - <default package>
 - Libraries
 - Test Libraries

- Modul5
- Modul6
- Modul9

 - Source Packages
 - Contoh
 - AbstrakClass.java
 - MethodMain.java
 - ObjekAbstrakClass.java
 - ObjekAbstrakClass1.java
 - Persiegi.java
 - TurunanAbstrakClass.java

19:1 | 15

Modul10 - NetBeans IDE 8.0.2

```
Source History Search (Ctrl+F) ...v1 Myclass.java NestedClass.java INDEX.LIST AbstractClass.java Cobo.java ActivityAnimal.java ActivityLampu.java AplikasiLampu.java Lampu.java Mammalia.java
```

Projects Services

Cobo

- Source Packages
 - cobo
 - Cobo.java
 - Jayabulta.java
 - Pegwaja.java
- Libraries
- DefaultModifier
- Modul10

 - Source Packages
 - <default package>
 - ActivityAnimal.java
 - ActivityLampu.java
 - AplikasiLampu.java
 - Lampu.java
 - Mammalia.java
 - Test Packages
 - Libraries
 - Test Libraries

- Modul11

 - Source Packages
 - modul11
 - Modul11.java
 - MyCobo.java
 - NestedClass.java
 - Outer.java
 - OuterDemo.java
 - OuterDemo2.java
 - OuterDemoMain.java
 - OuterDemoMy.java
 - myOuter.java
 - Test Packages
 - <default package>
 - Libraries
 - Test Libraries

- Modul4
- Modul5
- Modul6
- Modul9

 - Source Packages
 - Contoh
 - AbstrakClass.java
 - MethodMain.java
 - ObjekAbstrakClass.java
 - ObjekAbstrakClass1.java
 - Persiegi.java
 - TurunanAbstrakClass.java

45:2 | 15

Modul10 - NetBeans IDE 8.0.2

```

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
7 /**
8 * Author DJHM-PC
9 */
10 /*
11 * Author DJHM-PC
12 */
13
14 public class AplikasiLampu {
15     public static void main(String[] args) {
16         Lampu lampu = new Lampu();
17         Scanner sc = new Scanner(System.in);
18         lampu.setSaklar(sc.nextInt());
19         System.out.println("Status Lampu " + lampu.getStatusLampu() + " Ketikkan \"Untuk menyalaikan Lampu\" Untuk mematikan Lampu\"Untuk meredupkan Lampu\"");
20
21         if(lampu.setSaklar(sc.nextInt()) == 0){
22             lampu.matiKanLampu();
23         }else if(lampu.getStatusLampu() == 1){
24             lampu.hidupkanLampu();
25         }else{
26             lampu.redupkanLampu();
27         }
28     }
29 }
30
31

```

Output :

Modul10 - NetBeans IDE 8.0.2

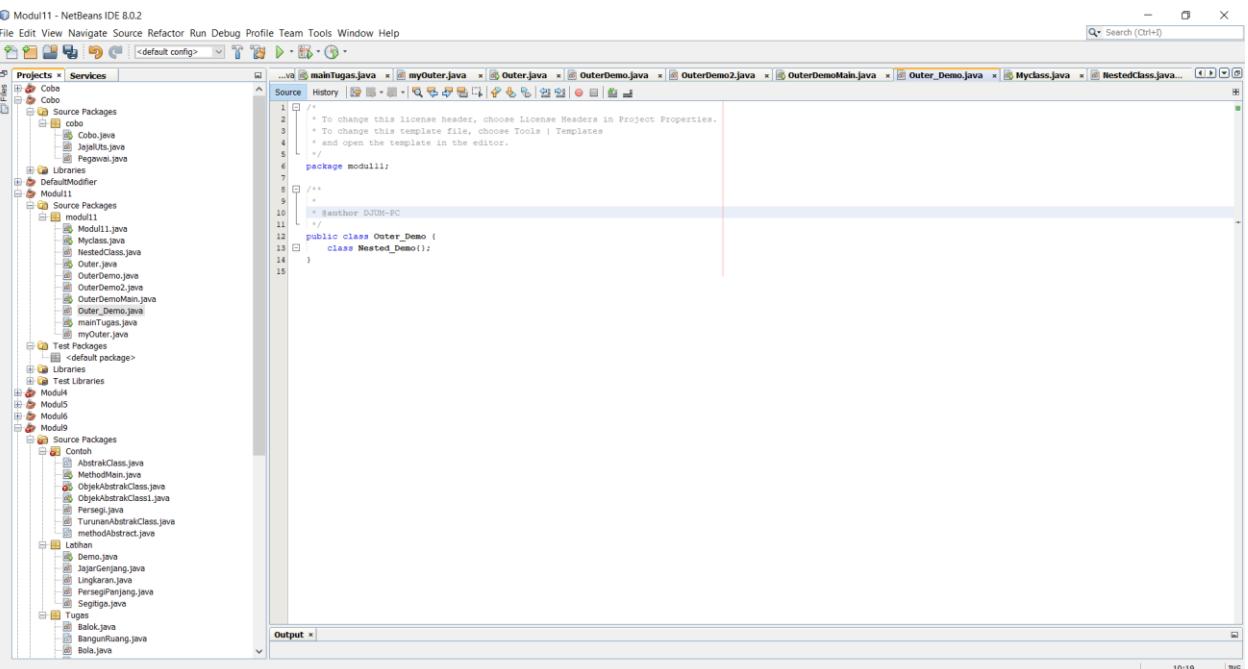
```

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
7 /**
8 * Author DJHM-PC
9 */
10 /*
11 * Author DJHM-PC
12 */
13
14 public class AplikasiLampu {
15     public static void main(String[] args) {
16         Lampu lampu = new Lampu();
17         Scanner sc = new Scanner(System.in);
18         lampu.setSaklar(sc.nextInt());
19
20         Status Lampu = 0
21         Ketikkan
22         1 Untuk menyalaikan Lampu
23         0 Untuk mematikan Lampu
24         2 Untuk meredupkan Lampu
25
26         Lampu sedang dalam kondisi mati
27         BUILD SUCCESSFUL (total time: 4 seconds)
28     }
29 }
30
31

```

MODUL 11

11.1 INNER CLASS (Non-Static Nested Class)

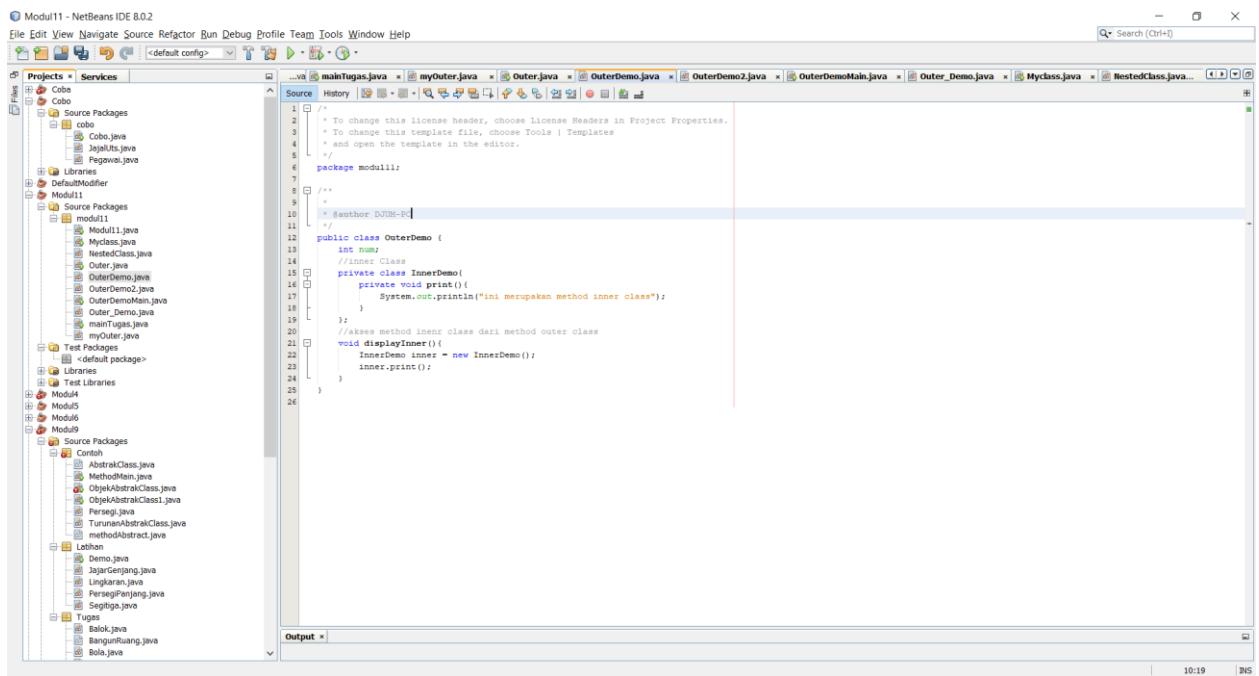


The screenshot shows the NetBeans IDE interface with the following details:

- Project:** Modul11 - NetBeans IDE 8.0.2
- Source Packages:** Coba, modul11
- Code Editor:** The current file is `Outer.java`. The code defines a package named `modul11` and contains a public class `Outer_Demo` with a nested class `Nested_Demo`.

```
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 modul11;
7
8  /**
9   * Author: DJHM-PC
10  */
11 public class Outer_Demo {
12     class Nested_Demo{};
13 }
14
```

- Output:** The output pane is empty.
- Bottom Status:** The status bar shows "10:19 35".



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

- Project:** Modul11 - NetBeans IDE 8.0.2
- Source Packages:** Coba, modul11
- Code Editor:** The current file is `Outer.java`. The code defines a package named `modul11` and contains a public class `OuterDemo` with a nested class `InnerDemo`. The `OuterDemo` class has a method `print()` that prints a message and creates an instance of `InnerDemo` to call its `print()` method.

```
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 modul11;
7
8  /**
9   * Author: DJHM-PC
10  */
11 public class OuterDemo {
12     int num;
13     //Inner Class
14     private class InnerDemo{
15         private void print(){
16             System.out.println("ini merupakan method inner class");
17         }
18     };
19     //akses method inner class dari method outer class
20     void displayInner(){
21         InnerDemo inner = new InnerDemo();
22         inner.print();
23     }
24 }
25
```

- Output:** The output pane is empty.
- Bottom Status:** The status bar shows "10:19 35".

Modul11 - NetBeans IDE 8.0.2

```

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 modul11;
7
8  /**
9  * @author DJUN-PC
10 */
11
12 public class MyOuter {
13     public static void main(String[] args) {
14         //membuat objek outer class
15         OuterDemo a = new OuterDemo();
16         a.displayInner();
17     }
18 }

```

Output :

Modul11 - NetBeans IDE 8.0.2

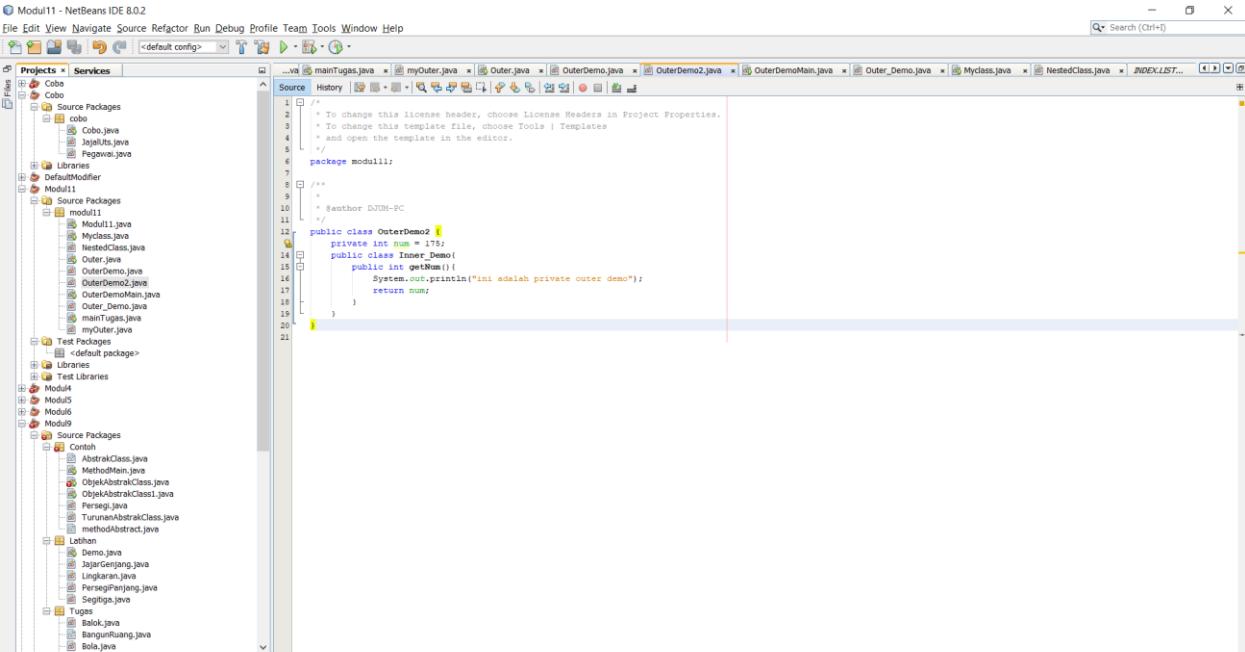
Output - Modul11 (run) ×

```

run:
ini merupakan method inner class
BUILD SUCCESSFUL (total time: 0 seconds)

```

11.2. MENGAKSES PRIVATE MEMBER



Modull1 - NetBeans IDE 8.0.2

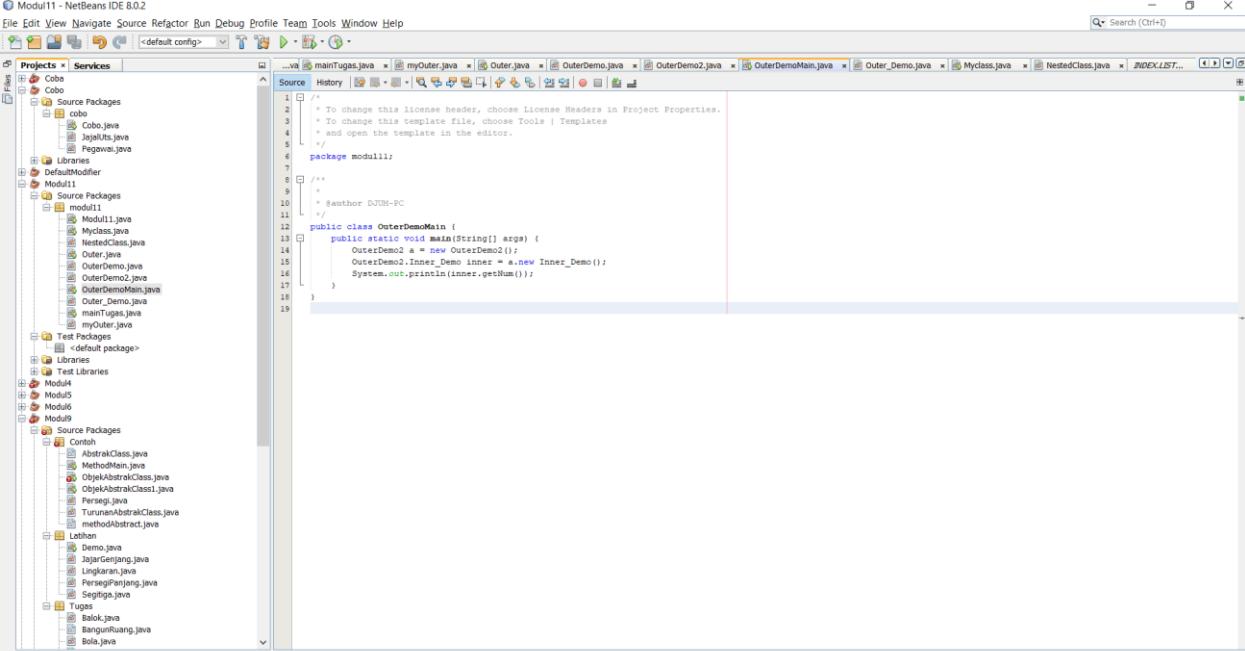
```
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
```

Projects Services

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 modull1;
6
7 /**
8 * @author DJUN-PC
9 */
10 public class OuterDemo2 {
11     private int num = 17;
12     public class Inner_Demo{
13         public int getNum(){
14             System.out.println("ini adalah private outer demo");
15             return num;
16         }
17     }
18 }
19
20
21
```

20:2 IN5



Modull1 - NetBeans IDE 8.0.2

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

Projects Services

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 modull1;
6
7 /**
8 * @author DJUN-PC
9 */
10 public class OuterDemoMain {
11     public static void main(String[] args) {
12         OuterDemo2 a = new OuterDemo2();
13         OuterDemo2.Inner_Demo inner = a.new Inner_Demo();
14         System.out.println(inner.getNum());
15     }
16 }
17
18
19
```

19:1 IN5

Output :

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

- Project Tree:** Shows a project named "Coba" containing several source packages and files.
- Source Editor:** Displays the code for `OuterDemoMain.java`. The code defines a static nested class `NestedDemo` within the `Outer` class, which contains a static method `myMethod`.
- Output Window:** Shows the build log: "BUILD SUCCESSFUL (total time: 0 seconds)".
- Status Bar:** Shows the time as 19:1.

```
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 modul1;
6  *
7  */
8 /**
9  * @author DJHM-PC
10 */
11 public class OuterDemoMain {
12     public static void main(String[] args) {
13         OuterDemo a = new OuterDemo();
14         OuterDemo.Inner_Demo inner = a.new Inner_Demo();
15         System.out.println(inner.getNum());
16     }
17 }
```

11.3. STATIC NESTED CLASS

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

- Project Tree:** Shows a project named "Coba" containing several source packages and files.
- Source Editor:** Displays the code for `Outer.java`. The code defines a static nested class `NestedDemo` within the `Outer` class, which contains a static method `myMethod`.
- Output Window:** Shows the build log: "BUILD SUCCESSFUL (total time: 0 seconds)".
- Status Bar:** Shows the time as 21:6.

```
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 modul1;
7
8 /**
9  * @author DJHM-PC
10 */
11
12 public class Outer {
13     static class NestedDemo{
14         public void myMethod(){
15             System.out.println("ini adalah method");
16         }
17     }
18     public static void main(String[] args) {
19         Outer.NestedDemo nested = new Outer.NestedDemo();
20         nested.myMethod();
21     }
22 }
```

Output :

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

- Project Tree:** Shows multiple projects including "Coba", "Modul1", "Modul2", "Modul3", "Modul4", "Modul5", "Modul6", and "Modul9".
- Source Editor:** Displays the code for `Outer.java` with the following content:

```
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 modul1;
6
7  /**
8  * @author DJUM-PC
9  */
10 public class Outer {
11     static class NestedDemo{
12         public void myMethod(){
13             System.out.println("ini adalah method");
14         }
15     }
16 }
17 
```
- Output Window:** Shows the output of the run command: "BUILD SUCCESSFUL (total time: 0 seconds)".
- Status Bar:** Shows "Finished building Modul1 (run)." and the time "21:16".

11.4. Latihan

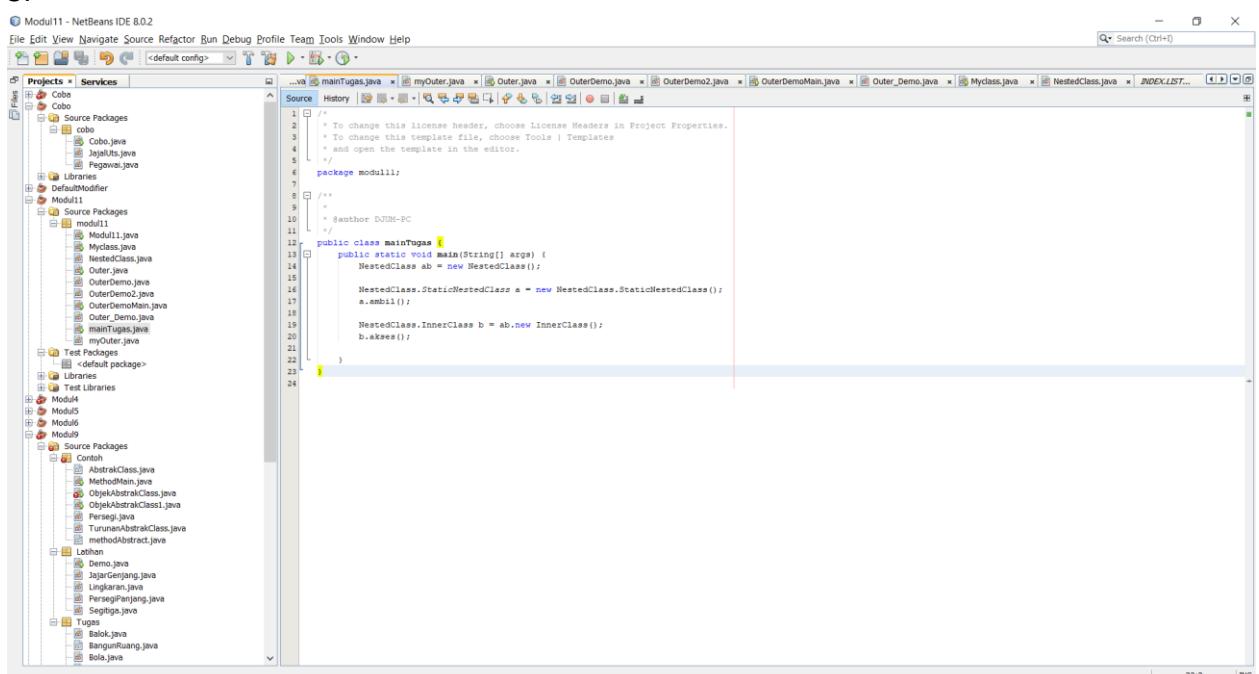
1 dan 2

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

- Project Tree:** Shows multiple projects including "Coba", "Modul1", "Modul2", "Modul3", "Modul4", "Modul5", "Modul6", and "Modul9".
- Source Editor:** Displays the code for `NestedClass.java` with the following content:

```
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 modul1;
6
7  /**
8  * @author DJUM-PC
9  */
10 public class NestedClass {
11     String nama ="Rizqi Aditya M";
12     String nim ="2013100005";
13     public void printNama(){
14         System.out.println(nama+" "+nim);
15     }
16     static class StaticNestedClass{
17         static String jurusan="Informatika";
18         void ambil(){
19             NestedClass a = new NestedClass();
20             a.printNama();
21         }
22     }
23     class InnerClass{
24         void akses(){
25             NestedClass.StaticNestedClass jur = new NestedClass.StaticNestedClass();
26             System.out.println("Jurusan: "+jur.jurusan);
27         }
28     }
29 }
30 
```
- Status Bar:** Shows the time "31:13".

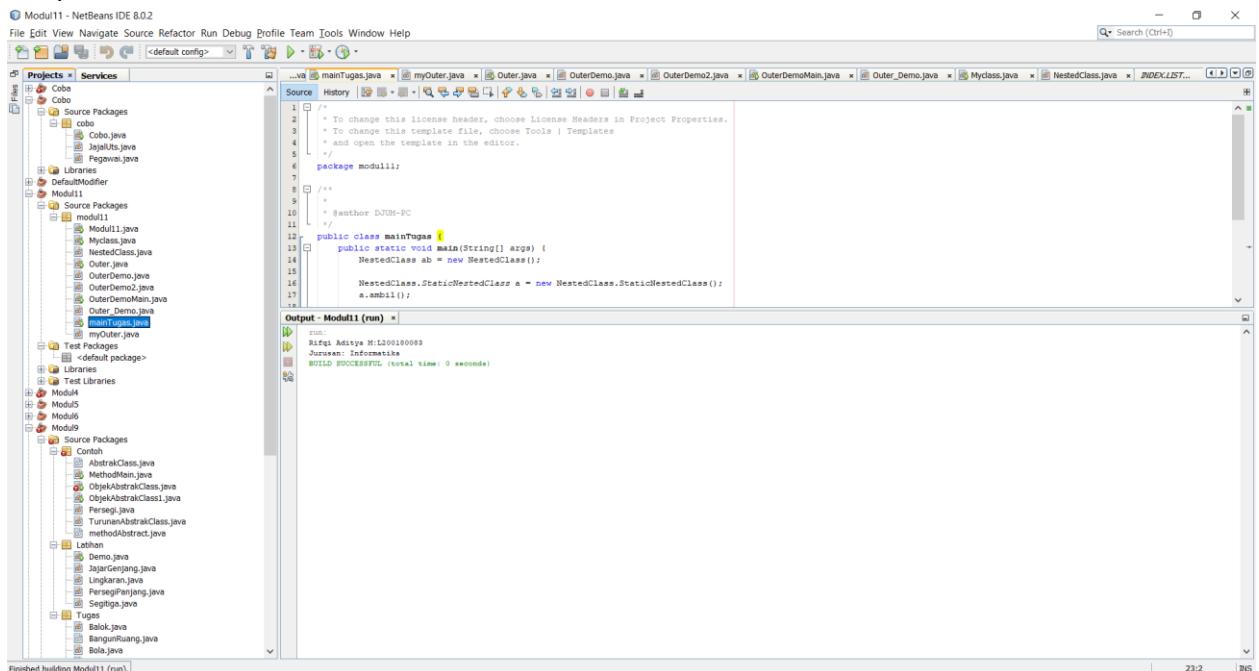
3.



The screenshot shows the NetBeans IDE interface with the title "Modul11 - NetBeans IDE 8.0.2". The left pane displays the project structure under "Projects". The main pane shows a Java source file named "mainTugas.java". The code implements a nested class structure:

```
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 modul11;
7
8  /**
9   * @author DJUN-PC
10  */
11
12 public class mainTugas {
13     public static void main(String[] args) {
14         NestedClass ab = new NestedClass.StaticNestedClass();
15
16         NestedClass.StaticNestedClass a = new NestedClass.StaticNestedClass();
17         a.ambil();
18
19         NestedClass.InnerClass b = ab.new InnerClass();
20         b.akses();
21     }
22 }
23
24
```

Output :



The screenshot shows the NetBeans IDE interface with the title "Modul11 - NetBeans IDE 8.0.2". The left pane displays the project structure under "Projects". The main pane shows the same Java source file "mainTugas.java". Below the code editor, there is an "Output" window titled "Output - Modul11 (run)". The output shows the results of running the code:

```
Rifqi Aditya M1200180083
Jurusan : Informatika
BUILD SUCCESSFUL (total time: 0 seconds)
```

MODUL 12

12.5.1. Frame

```
package modul12;
/*
 * 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.
 */
public class Utama extends javax.swing.JFrame {
    public Utama() {
        super("Belajar mengenal GUI");
        setLayout(null);
        setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
        setVisible(true);
        setLocationRelativeTo(null);
    }
    public static void main(String[] args) {
        Utama u = new Utama();
    }
}
```

Konstruktor	Keterangan
JFrame()	Membuat JFrame tanpa judul
JFrame(String Judul)	Membuat JFrame dengan judul

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

12.5.2. Button

Modul12 - NetBeans IDE 8.0.2

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

Projects Services

```

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 modul12;
7
8 /**
9  * Author LABRPL-18
10 */
11
12 import java.awt.Container;
13 import javax.swing.JButton;
14
15 public class FrameA extends javax.swing.JFrame {
16     public FrameA() {
17         super("Frame dan Button");
18         setSize(100,50);
19         setDefaultCloseOperation(EXIT_ON_CLOSE);
20         setVisible(true);
21         setLocationRelativeTo(null);
22     }
23
24     public static void main(String[] args) {
25         FrameA fa = new FrameA();
26         Container panel = fa.getContentPane();
27         JButton jbOK = new JButton("OK");
28         panel.add(jbOK);
29     }
30 }
31

```

Frame ..

Output

Modul12 (run) #2

Transferring Maven repository index: Central Repository 35% (1 more...) 19:25/2:49 285

konstruktur	Keterangan
JButton()	Membuat JButton tanpa teks maupun icon
JButton(String teks)	Membuat JButton dengan teks
JButton(Icon icon)	Membuat JButton dengan icon
JButton(String teks, Icon icon)	Membuat JButton dengan teks dan icon

12.5.3. Container

Modul12 - NetBeans IDE 8.0.2

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

Projects Services

```

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 modul12;
7
8
9 import java.net.URL;
10 import javax.swing.ImageIcon;
11 import javax.swing.JButton;
12 import javax.swing.JPanel;
13
14 /**
15  * Author LABRPL-18
16 */
17
18 public class FrameB extends javax.swing.JFrame {
19     public FrameB() {
20         super("Frame dan Button");
21         setSize(500,500);
22         setDefaultCloseOperation(EXIT_ON_CLOSE);
23         setLocationRelativeTo(null);
24     }
25
26     public static void main(String[] args) {
27         FrameB fb = new FrameB();
28         JPanel panel = new JPanel();
29         URL img = FrameB.class.getResource("Penguins.jpg");
30         JButton jbOK = new JButton("OK");
31         jbOK.setIcon(new ImageIcon(img));
32         panel.add(jbOK);
33     }
34 }
35

```

Frame dan Button

Output

Modul12 (run) #2

Transferring Maven repository index: Central Repository 37% (2 more...) 1:1 285

12.5.4. Label

Modul12 - NetBeans IDE 8.0.2

```

    /*
     * 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.
     */
    package modul12;

    import java.net.URL;
    import javax.swing.ImageIcon;
    import javax.swing.JLabel;
    import javax.swing.JPanel;
    import javax.swing.SwingConstants;
    import javax.swing.UIManager;
    /**
     * @author LABRPL-18
     */
    public class DemoLabel {
        public static void main(String[] args) {
            Utama u = new Utama();
            u.setVisible(true);
            u.setSize(400, 300);
            ImageIcon img = Frame.class.getResource("Penguins.jpg");
            ImageIcon ikon = new ImageIcon(img);
            JLabel label = new JLabel("Label", ikon, SwingConstants.CENTER);
            JPanel panel = new JPanel();
            panel.add(label);
            u.add(panel);
        }
    }

```

Output:

```

Modul12 (run) #4 x Modul12 (run) *
run

```

konstruktor	keterangan
JLabel (String teks)	Label dengan teks
JLabel (String teks, int i)	Label dengan teks dan alignment (perataan). Terdapat tiga jenis alignment : LEFT, CENTER, dan RIGHT
JLabel (String teks, Icon ic, int i)	Label dengan teks, icon, dan alignment

12.5.5. TextField dan Password Field

Modul12 - NetBeans IDE 8.0.2

```

    /*
     * 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.
     */
    package modul12;

    import javax.swing.JLabel;
    import javax.swing.JPanel;
    import javax.swing.JTextField;
    import javax.swing.JPasswordField;
    /**
     * @author LABRPL-18
     */
    public class DemoTextField {
        public static void main(String[] args) {
            Utama u = new Utama();
            JLabel name = new JLabel("Name : ");
            JLabel password = new JLabel("Password : ");
            JTextField inputName = new JTextField(15);
            JPasswordField inputPass = new JPasswordField(15);
            JPanel panel = new JPanel();
            panel.add(name);
            panel.add(inputName);
            panel.add(password);
            panel.add(inputPass);
            u.add(panel);
        }
    }

```

Output:

```

Modul12 (run) #4 x Modul12 (run) * Modul12 (run) #2 x Modul12 (run) #3 *
run

```

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
String Text	Teksi dalam Text field
Boolean Editable	Menentukan bisa tidaknya teks dalam Text field untuk diedit
Int columns	Jumlah kolom pada Text field
Int horizontalAlignment	Perataan horizontal pada Text field

12.5.6. Radio Button dan CheckBox

```

import javax.swing.*;
public class DemoRadioButton {
    public static void main(String[] args) {
        Utama u = new Utama();
        u.setSize(1000, 100);
        JRadioButton[] teams = new JRadioButton[4];
        teams[0] = new JRadioButton("Sangat tidak setuju");
        teams[1] = new JRadioButton("Sangat setuju");
        teams[2] = new JRadioButton("Tidak setuju");
        teams[3] = new JRadioButton("Kurang setuju");
        JPanel panel = new JPanel();
        JLabel pernyataan = new JLabel("Modul Praktikum PBO jelas dan mudah.");
        panel.add(pernyataan);
        ButtonGroup group = new ButtonGroup();
        for (int i = 0; i < teams.length; i++) {
            group.add(teams[i]);
            panel.add(teams[i]);
        }
        u.add(panel);
        u.setVisible(true);
    }
}

```

Konstruktor	Penjelasan
JCheckBox (String teks)	Check box dengan teks yang ditentukan

JCheckBox(String, Boolean)	Check box dengan teks yang ditentukan. jika kondisi pada parameter kedua true, maka Check box ini akan dipilih
JCheckBox(icon)	Check box dengan gambar icon
JCheckBox(icon, Boolean)	Check box dengan gambar icon dan terpilih jika true
JCheckBox(String, Icon)	Check box dengan tulisan dan gambar icon
JCheckBox(String, Icon, Boolean)	Check box dengan tulisan dan gambar icon, akan dipilih secara default jika kondisi true.

Tugas

Modul12 - NetBeans IDE 8.0.2

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

- Projects:** Modul12 contains several packages: Letham, Tugas, and Tugasi. The Tugasi package contains the Tugas1.java file.
- Code Editor:** The Tugas1.java file is open, displaying Java code for creating a JFrame titled "Tugas 1". The code includes imports for javax.swing, creates a JComboBox with four items ("Tidak Setuju", "Kurang Setuju", "Setuju", "Sangat Setuju"), and adds a JLabel with the text "Modul Praktikum Pemrograman Berorientasi Objek jelas dan mudah" to a JPanel.
- Output Window:** The Output window shows the application running with the title bar "Tugas 1" and the text "Modul Praktikum Pemrograman Berorientasi Objek jelas dan mudah" visible inside the frame.
- Status Bar:** The status bar at the bottom indicates "Transferring Maven repository index: Central Repository" and "1:1".

```

4  * and open the template in the editor.
5  */
6  package Tugas;
7
8  import javax.swing.JCheckBox;
9  import javax.swing.JLabel;
10 import javax.swing.JPanel;
11
12 /**
13  * @author Win 9.1
14  */
15
16 public class Tugas1 extends javax.swing.JFrame{
17     public Tugas1(){
18         super("Tugas 1");
19         setSize(1000, 300);
20         setDefaultCloseOperation(EXIT_ON_CLOSE);
21         setVisible(true);
22         setLocationRelativeTo(null);
23     }
24
25     public static void main(String[] args){
26         Tugas1 t1 = new Tugas1();
27         String[] items = {"Tidak Setuju", "Kurang Setuju", "Setuju", "Sangat Setuju"};
28         JComboBox combo = new JComboBox(A);
29         JPanel panel = new JPanel();
30         JLabel Persyaratan = new JLabel("Modul Praktikum Pemrograman Berorientasi Objek jelas dan mudah");
31         panel.add(Persyaratan);
32         t1.add(panel);
33         t1.setVisible(true);
34     }
35 }

```

Modul12 - NetBeans IDE 8.0.2

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

default config

Projects Services

...va Tugas1.java Tugas2.java Tugas1.java menu.java Utama.java Utama.java FrameA.java FrameB.java DemoLabel.java DemoLabel.java DemoRadioButton.java

Source Design 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
7  package Tugas;
8
9  import java.awt.Color;
10
11 /**
12  * @author LABRUL-9
13  */
14 public class menu extends javax.swing.JFrame {
15
16     /**
17      * Creates new form menu
18     */
19     public menu() {
20         initComponents();
21     }
22
23     /**
24      * This method is called from within the constructor to initialize the form.
25      * WARNING: Do NOT modify this code. The content of this method is always
26      * regenerated by the Form Editor.
27      */
28     @SuppressWarnings("unchecked")
29     // Generated Code
30
31     private void jMenuItemActionPerformed(java.awt.event.ActionEvent evt) {
32         jPanel1.setBackground(Color.red);
33     }
34
35     private void jMenuItem2ActionPerformed(java.awt.event.ActionEvent evt) {
36         jPanel1.setBackground(Color.yellow);
37     }
38
39     private void jMenuItem3ActionPerformed(java.awt.event.ActionEvent evt) {
40         jPanel1.setBackground(Color.green);
41     }
42
43     /**
44      * Sparan args the command line arguments
45     */
46     public static void main(String args[]) {
47         /* Set the Nimbus look and feel */
48         // Look and Feel setting code (optional)
49
50         // Create and display the form
51         java.awt.EventQueue.invokeLater(new Runnable() {
52             public void run() {
53                 new menu().setVisible(true);
54             }
55         });
56     }
57
58     // Variables declaration - do not modify
59     private javax.swing.JMenuBar jMenuBar1;
60     private javax.swing.JMenuItem jMenuItem1;
61     private javax.swing.JPanel jPanel1;
62     private javax.swing.JMenuItem jMenuItem2;
63     private javax.swing.JMenuItem jMenuItem3;
64     private javax.swing.JFrame jPanel1;
65     // End of variables declaration
66 }

```

Transferring Maven repository index: Central Repository 54% (5 more...) 1:1 INS

Modul12 - NetBeans IDE 8.0.2

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

default config

Projects Services

...va Tugas1.java Tugas2.java Tugas1.java menu.java Utama.java Utama.java FrameA.java FrameB.java DemoLabel.java DemoLabel.java DemoRadioButton.java

Source Design History

```

22
23 /**
24  * This method is called from within the constructor to initialize the form.
25  * WARNING: Do NOT modify this code. The content of this method is always
26  * regenerated by the Form Editor.
27  */
28 @SuppressWarnings("unchecked")
29 // Generated Code
30
31 private void jMenuItemActionPerformed(java.awt.event.ActionEvent evt) {
32     jPanel1.setBackground(Color.red);
33 }
34
35 private void jMenuItem2ActionPerformed(java.awt.event.ActionEvent evt) {
36     jPanel1.setBackground(Color.yellow);
37 }
38
39 private void jMenuItem3ActionPerformed(java.awt.event.ActionEvent evt) {
40     jPanel1.setBackground(Color.green);
41 }
42
43 /**
44  * Sparan args the command line arguments
45 */
46 public static void main(String args[]) {
47     /* Set the Nimbus look and feel */
48     // Look and Feel setting code (optional)
49
50     /* Create and display the form */
51     java.awt.EventQueue.invokeLater(new Runnable() {
52         public void run() {
53             new menu().setVisible(true);
54         }
55     });
56 }
57
58 // Variables declaration - do not modify
59 private javax.swing.JMenuBar jMenuBar1;
60 private javax.swing.JMenuItem jMenuItem1;
61 private javax.swing.JPanel jPanel1;
62 private javax.swing.JMenuItem jMenuItem2;
63 private javax.swing.JMenuItem jMenuItem3;
64 private javax.swing.JFrame jPanel1;
65 // End of variables declaration
66 }

```

Transferring Maven repository index: Central Repository 54% (5 more...) 1:1 INS

