

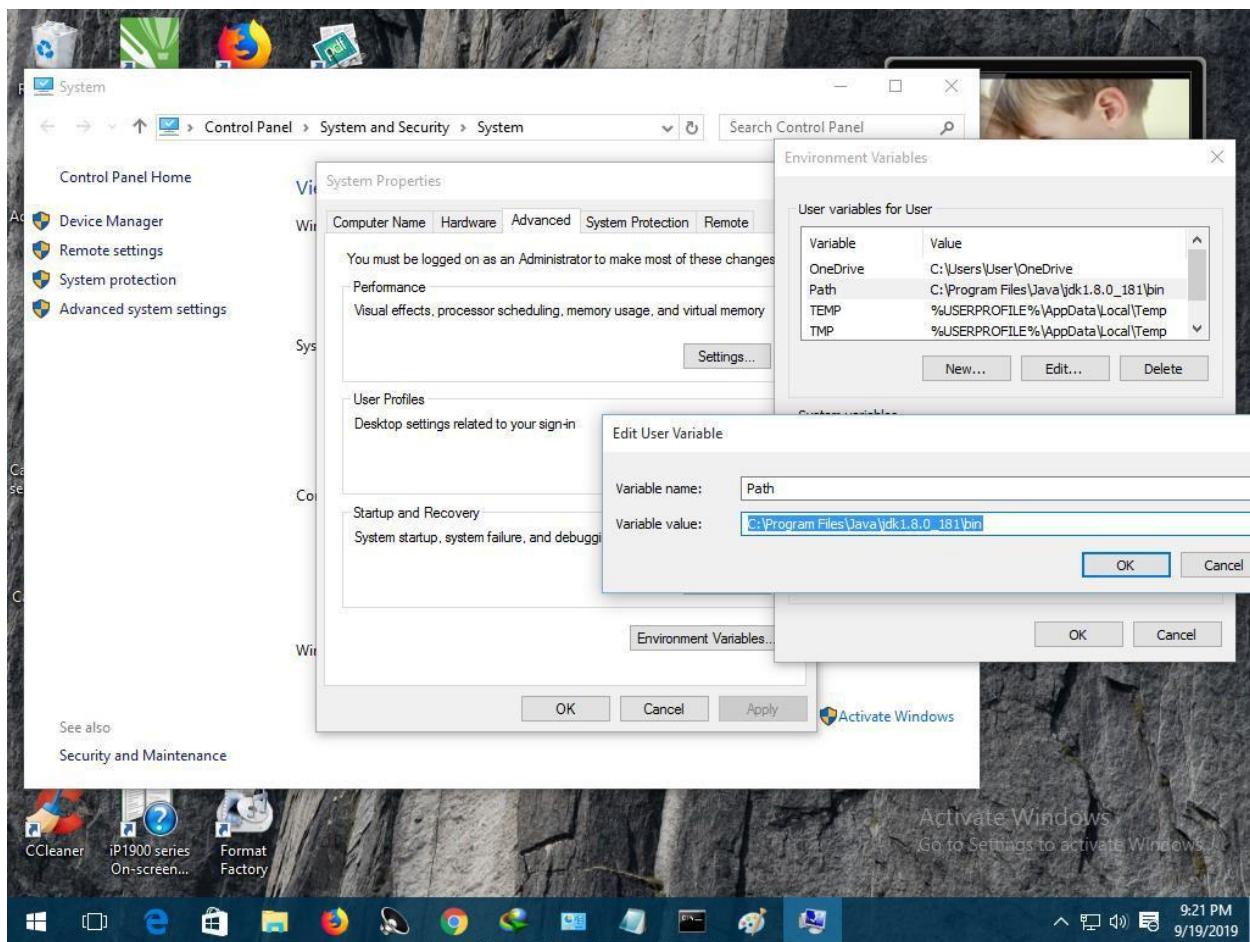
Nama : Aulia Yogatama

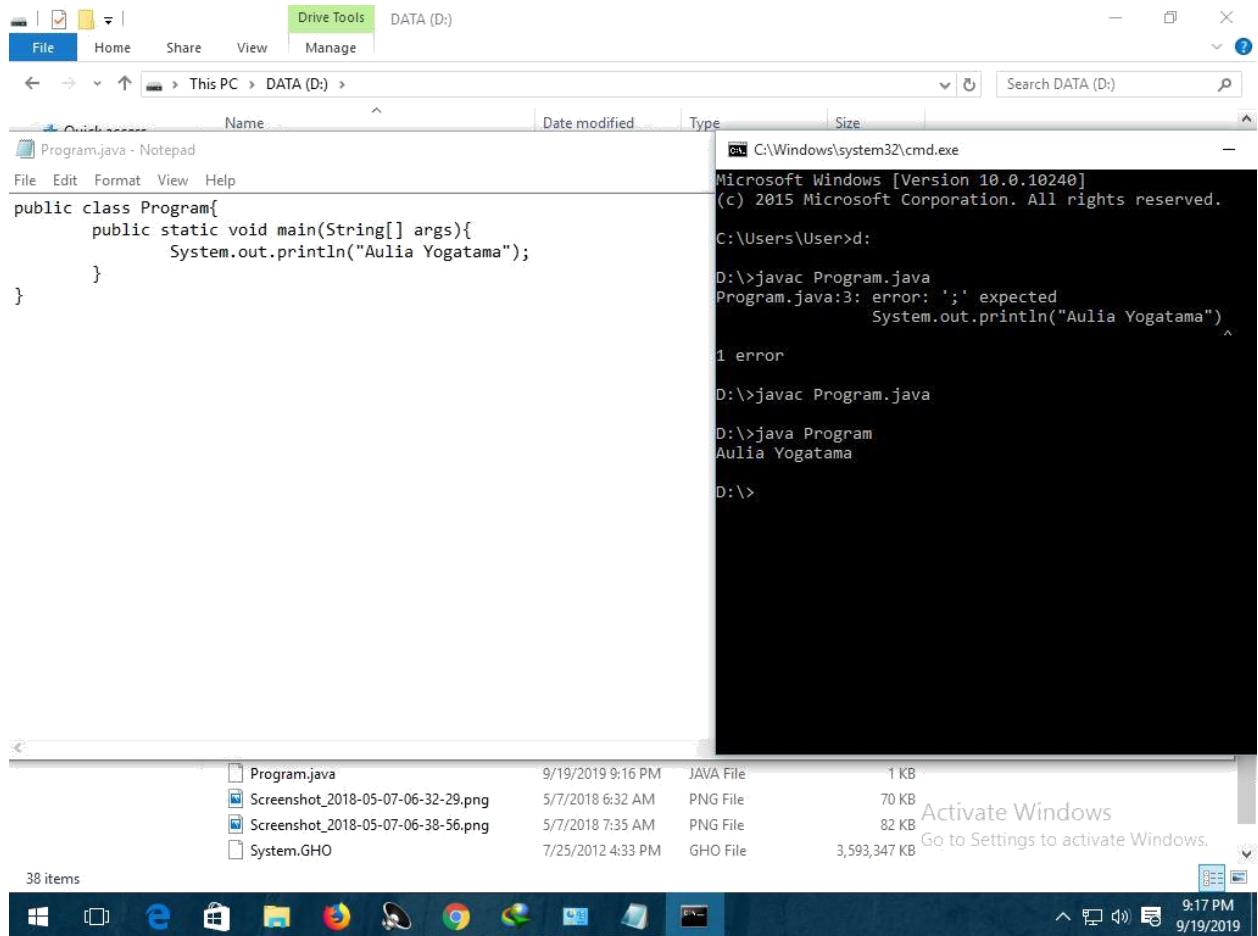
NIM : L200180081

Kelas : B

Modul 1- 12

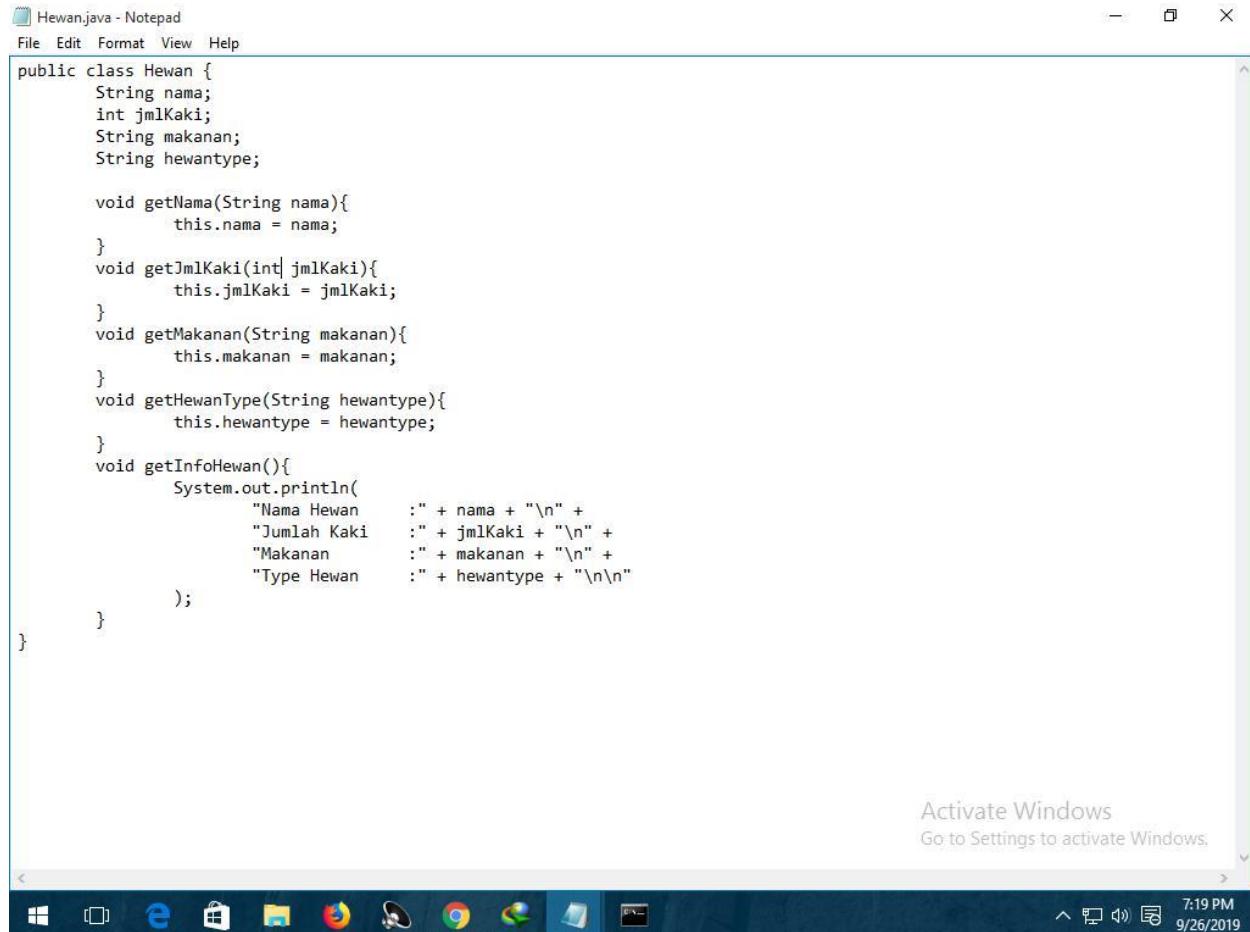
➤ Modul 1





➤ Modul 2

Class Hewan.java



```
Hewan.java - Notepad
File Edit Format View Help
public class Hewan {
    String nama;
    int jmlKaki;
    String makanan;
    String hewantype;

    void getNama(String nama){
        this.nama = nama;
    }
    void getJmlKaki(int jmlKaki){
        this.jmlKaki = jmlKaki;
    }
    void getMakanan(String makanan){
        this.makanan = makanan;
    }
    void getHewanType(String hewantype){
        this.hewantype = hewantype;
    }
    void getInfoHewan(){
        System.out.println(
            "Nama Hewan      :" + nama + "\n" +
            "Jumlah Kaki   :" + jmlKaki + "\n" +
            "Makanan       :" + makanan + "\n" +
            "Type Hewan     :" + hewantype + "\n\n"
        );
    }
}

Activate Windows
Go to Settings to activate Windows.

Windows Start Taskbar 7:19 PM 9/26/2019
```

Class HewanDemo.java

```
File Edit Format View Help
public class HewanDemo{
    public static void main(String[] args){
        Hewan hewan1 = new Hewan();
        Hewan hewan2 = new Hewan();
        hewan1.getNama("Harimau");
        hewan1.getJmlKaki(4);
        hewan1.getMakanan("Daging");
        hewan1.getHewanType("Karnivora");
        hewan1.getInfoHewan();

        hewan2.getNama("Kerbau");
        hewan2.getJmlKaki(4);
        hewan2.getMakanan("Rumput");
        hewan2.getHewanType("Herbivora");
        hewan2.getInfoHewan();
    }
}
```

Activate Windows
Go to Settings to activate Windows.

7:22 PM 9/26/2019

Hasil

The screenshot shows a Windows Command Prompt window titled 'cmd C:\Windows\system32\cmd.exe'. The command line shows the user navigating to the directory 'D:\tugas yoga\Prak PBO' and executing 'javac Hewan.java' and 'javac HewanDemo.java'. The output displays the contents of the Java files, which define two classes: 'Hewan' and 'HewanDemo'. The 'Hewan' class has fields 'Nama Hewan', 'Jumlah Kaki', 'Makanan', and 'Type Hewan' with values 'Harimau', '4', 'Daging', and 'Karnivora' respectively. The 'HewanDemo' class has the same four fields with values 'Kerbau', '4', 'Rumput', and 'Herbivora' respectively. The command line ends with 'D:\tugas yoga\Prak PBO>'. The taskbar at the bottom shows various application icons, and a system tray icon for 'Activate Windows' is visible.

```
C:\Windows\system32\cmd.exe
D:\tugas yoga\Prak PBO>javac Hewan.java
D:\tugas yoga\Prak PBO>javac HewanDemo.java
D:\tugas yoga\Prak PBO>java HewanDemo
Nama Hewan      :Harimau
Jumlah Kaki    :4
Makanan :Daging
Type Hewan     :Karnivora

Nama Hewan      :Kerbau
Jumlah Kaki    :4
Makanan :Rumput
Type Hewan     :Herbivora

D:\tugas yoga\Prak PBO>
```

Activate Windows
Go to Settings to activate Windows.

7:22 PM 9/26/2019

➤ Modul 3

Latihan 1

The screenshot shows a Windows desktop environment. In the center, there is a Notepad window titled "LocalVariable.java - Notepad" containing the following Java code:

```
public class LocalVariable{
    public void HitungUsia(){
        int usia = 0;
        int tahunSekarang = 2019;
        int tahunLahir = 2000;
        usia = tahunSekarang - tahunLahir;

        System.out.println("Usia saya : " + usia);
    }
    public void beratBadan(){
        int beratLahir = 0;
        int umur = usia;
        int beratBadan = beratLahir + (umur/2);

        System.out.println("Berat Saya : " + beratBadan);
    }
    public static void main(String[] args){
        LocalVariable Local = new LocalVariable();
        Local.HitungUsia();
        Local.beratBadan();
    }
}
```

To the right of the Notepad window is a cmd.exe window titled "C:\Windows\system32\cmd.exe". It displays the following error message from the Java compiler:

```
D:\tugas yoga\Prak PBO\Modul 3>javac LocalVariable.java
LocalVariable.java:12: error: cannot find symbol
          int umur = usia;
                           ^
      symbol:   variable usia
      location: class LocalVariable
1 error

D:\tugas yoga\Prak PBO\Modul 3>
```

At the bottom of the screen, the taskbar shows various pinned icons and the system tray indicates the date and time as "6:45 PM 10/3/2019". A watermark for "Activate Windows" is visible in the center of the screen.

Latihan 2

The screenshot shows a Windows desktop environment. In the foreground, there is a Notepad window titled "LocalVariable.java - Notepad" containing the following Java code:

```
LocalVariable.java - Notepad
File Edit Format View Help
public class LocalVariable{
    int usia = 0;
    public void Hitungusia(){
        //Local variable
        int tahunSekarang = 2019;
        int tahunLahir = 2000;

        usia = tahunSekarang - tahunLahir;
        System.out.println("Usia saya :" + usia);
    }

    public void beratBadan() {
        this.usia = usia;
        int beratLahir= 3;
        int umur = usia;
        int beratBadan = beratLahir +(umur/2);

        System.out.println("Berat Saya :" + beratBadan);
    }

    public static void main(String[] args){
        LocalVariable Local = new Localvariable();
        Local.Hitungusia();
        Local.beratBadan();
    }
}
```

Below the Notepad window is a Command Prompt window titled "cmd.exe" showing the output of the compilation process:

```
C:\Windows\system32\cmd.exe
D:\>javac LocalVariable.java
LocalVariable.java:14: error: cannot find symbol
    this.usia = usia;
               ^
symbol:   variable usia
LocalVariable.java:14: error: cannot find symbol
    this.usia = usia;
               ^
symbol:   variable usia
location: class LocalVariable
LocalVariable.java:16: error: cannot find symbol
    int umur = usia;
               ^
symbol:   variable usia
location: class LocalVariable
3 errors

D:\>javac LocalVariable.java
D:\>java LocalVariable
Usia Saya :19
Berat Saya :12
D:\>_
```

The taskbar at the bottom of the screen shows several pinned icons, including File Explorer, Edge, and others. The system tray indicates the date and time as 9/27/2019 at 3:47 PM.

Latihan 3

The screenshot shows a Windows desktop environment. In the foreground, there is a Notepad window titled "Pegawai.java - Notepad" containing Java code for a Pegawai class. Below it is a Command Prompt window titled "C:\Windows\system32\cmd.exe" showing the output of running the compiled Java program.

Notepad Content (Pegawai.java):

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

    public String setNama(String nama){
        return this.nama = nama;
    }
    public int setNIP(int nip){
        return this.nip = nip;
    }
    public double setGaji(double gaji){
        return this.gaji = gaji;
    }

    public static void main(String[] args){
        Pegawai P1 = new Pegawai();
        Pegawai P2 = new Pegawai();
        Pegawai P3 = new Pegawai();
        Pegawai P4 = new Pegawai();
        Pegawai P5 = new Pegawai();
        P1.setNama("Bagus");
        P1.setNIP(1200180081);
        P1.setGaji(1000000);
        P2.setNama("Aji");
        P2.setNIP(1200180085);
        P2.setGaji(2000000);
        P3.setNama("Andi");
        P3.setNIP(1200180087);
        P3.setGaji(3000000);
        P4.setNama("List");
        P4.setNIP(1200180089);
        P4.setGaji(4000000);
        P5.setNama("Dinda");
        P5.setNIP(1200180090);
        P5.setGaji(5000000);
    }
}
```

Command Prompt Output:

```
D:\tugas yoga\Prak PBO\Modul 3>javac Pegawai.java
D:\tugas yoga\Prak PBO\Modul 3>java Pegawai
Bagus
1200180081
1000000.0
Aji
1200180085
2000000.0
Andi
1200180087
3000000.0
List
1200180089
4000000.0
Dinda
1200180090
5000000.0
D:\tugas yoga\Prak PBO\Modul 3>
```

At the bottom right of the screen, there is a watermark that says "Activate Windows" and "Go to Settings to activate Windows." The taskbar at the bottom shows various pinned icons and the system tray with the date and time (10/3/2019, 7:44 PM).

Pegawai.java - Notepad

File Edit Format View Help

```
P1.setGaji(1000000);
P2.setNama("Aji");
P2.setNIP(1200180085);
P2.setGaji(2000000);
P3.setNama("Andi");
P3.setNIP(1200180087);
P3.setGaji(3000000);
P4.setNama("List");
P4.setNIP(1200180089);
P4.setGaji(4000000);
P5.setNama("Dinda");
P5.setNIP(1200180090);
P5.setGaji(5000000);
System.out.println(
    P1.nama + "\n" +
    P1.nip + "\n" +
    P1.gaji);
System.out.println(
    P2.nama + "\n" +
    P2.nip + "\n" +
    P2.gaji);
System.out.println(
    P3.nama + "\n" +
    P3.nip + "\n" +
    P3.gaji);
System.out.println(
    P4.nama + "\n" +
    P4.nip + "\n" +
    P4.gaji);
System.out.println(
    P5.nama + "\n" +
    P5.nip + "\n" +
    P5.gaji);

}
```

C:\Windows\system32\cmd.exe

D:\tugas yoga\Prak PBO\Modul 3>javac Pegawai.java

D:\tugas yoga\Prak PBO\Modul 3>java Pegawai

Bagus
1200180081
1000000.0
Aji
1200180085
2000000.0
Andi
1200180087
3000000.0
List
1200180089
4000000.0
Dinda
1200180090
5000000.0

Activate Windows
Go to Settings to activate Windows.

Pekerjaan Rumah

The screenshot shows a Windows desktop environment. On the left, there is a Notepad window titled "Nilai.java - Notepad" containing Java code for a class named "Nilai". The code defines a class with methods to set and get values for UTS, UAS, and Tugas, and a method to calculate the total grade. On the right, there is a Command Prompt window titled "C:\Windows\system32\cmd.exe" showing the output of running the code. The output shows the input values (85, 80, 90) and the calculated total (255.0). A watermark for "Activate Windows" is visible in the bottom right corner of the screen.

```
public class Nilai{
    int nilaiUTS;
    int nilaiUAS;
    int nilaiTugas;

    public int setUTS (int nilaiUTS){
        return this.nilaiUTS = nilaiUTS;
    }
    public int setUAS (int nilaiUAS){
        return this.nilaiUAS = nilaiUAS;
    }
    public int setTugas (int nilaiTugas){
        return this.nilaiTugas = nilaiTugas;
    }

    public double ubahUTS(){
        String newUTS = String.valueOf(nilaiUTS);
        double fixUTS = Double.parseDouble(newUTS);
        return fixUTS;
    }
    public double ubahUAS(){
        String newUAS = String.valueOf(nilaiUAS);
        double fixUAS = Double.parseDouble(newUAS);
        return fixUAS;
    }
    public double ubahTugas(){
        String newTugas = String.valueOf(nilaiTugas);
        double fixTugas = Double.parseDouble(newTugas);
        return fixTugas;
    }

    public void nilaiTotal(){
        Double nilaiTotal = ubahUTS() + ubahUAS() + ubahTugas();
        System.out.println(
            "Nilai UTS      :" + nilaiUTS + "\n"+
            "Nilai UAS      :" + nilaiUAS + "\n"+
            "Nilai Tugas     :" + nilaiTugas + "\n"+
            "Nilai Total     :" + nilaiTotal);
    }
}
```

```
D:\tugas yoga\Prak PBO\Modul 3>javac Nilai.java
D:\tugas yoga\Prak PBO\Modul 3>java Nilai
Nilai UTS      :85
Nilai UAS      :80
Nilai Tugas     :90
Nilai Total     :255.0
D:\tugas yoga\Prak PBO\Modul 3>
```

Activate Windows
Go to Settings to activate Windows.

The screenshot shows a Windows desktop environment. In the foreground, there is a Notepad window titled "Nilai.java - Notepad" containing Java code. Below it is a Command Prompt window titled "C:\Windows\system32\cmd.exe". The Java code defines a class named Nilai with methods for calculating UT斯成绩 (fixUTS), UAS成绩 (ubahUAS), Tugas成绩 (ubahTugas), and total成绩 (nilaiTotal). It also has a main method that creates an instance of Nilai, sets UT斯成绩 to 85, sets UAS成绩 to 80, sets Tugas成绩 to 90, and then calls nilaiTotal(). The Command Prompt window shows the output of running javac Nilai.java followed by java Nilai, displaying the results: UT斯成绩 85, UAS成绩 80, Tugas成绩 90, and Total成绩 255.0.

```
double fixUTS = Double.parseDouble(newUTS);
    return fixUTS;
}
public double ubahUAS(){
    String newUAS = String.valueOf(nilaiUAS);
    double fixUAS = Double.parseDouble(newUAS);
    return fixUAS;
}
public double ubahTugas(){
    String newTugas = String.valueOf(nilaiTugas);
    double fixTugas = Double.parseDouble(newTugas);
    return fixTugas;
}

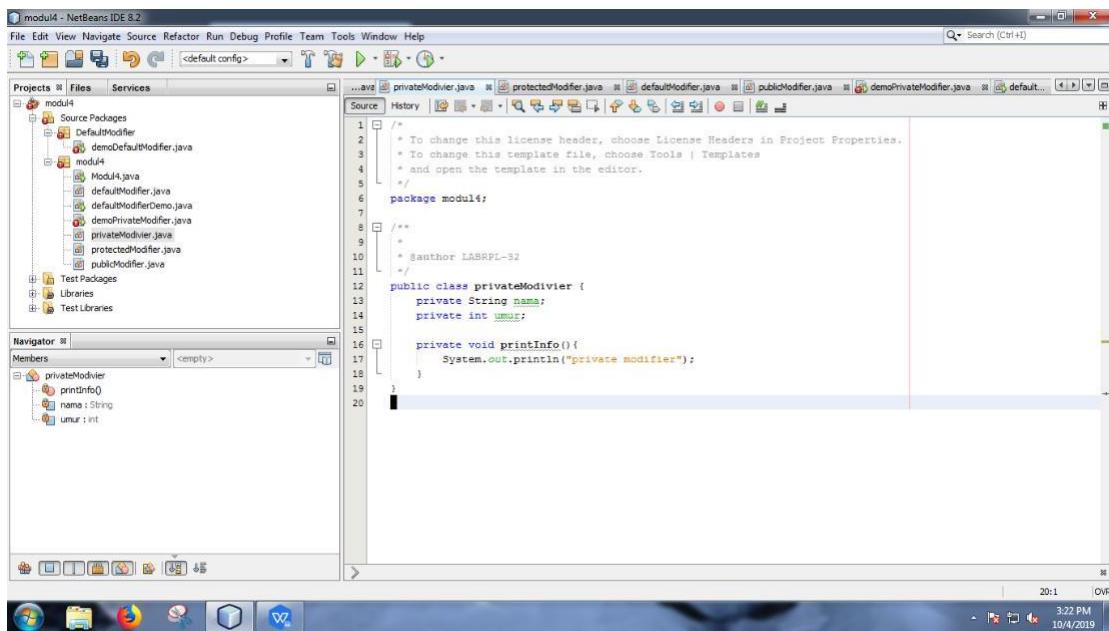
public void nilaiTotal(){
    Double nilaiTotal = ubahUTS() + ubahUAS() + ubahTugas();
    System.out.println(
        "Nilai UT斯      :" + nilaiUTS + "\n"+
        "Nilai UAS      :" + nilaiUAS + "\n"+
        "Nilai Tugas     :" + nilaiTugas + "\n"+
        "Nilai Total     :" + nilaiTotal);
}

public static void main(String[] args){
    Nilai n1 = new Nilai();
    n1.setUTS(85);
    n1.ubahUTS();
    n1.setUAS(80);
    n1.ubahUAS();
    n1.setTugas(90);
    n1.ubahTugas();
    n1.nilaiTotal();
}
```

```
D:\tugas yoga\Prak PBO\Modul 3>javac Nilai.java
D:\tugas yoga\Prak PBO\Modul 3>java Nilai
Nilai UT斯      :85
Nilai UAS      :80
Nilai Tugas     :90
Nilai Total     :255.0
```

➤ Modul 4

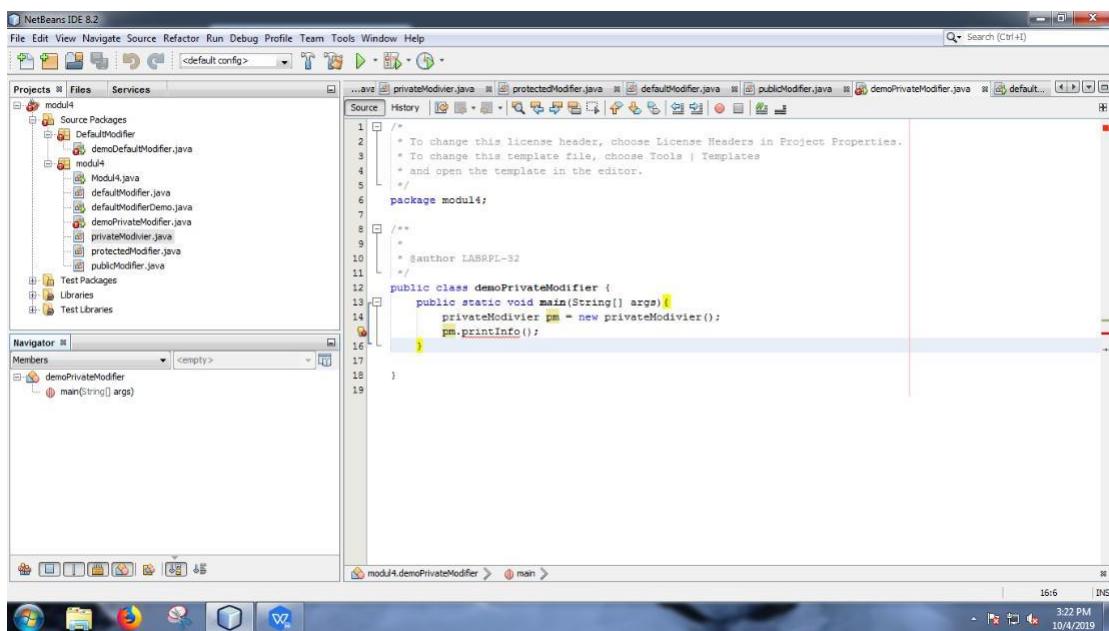
PRIVATE MODIFIER



The screenshot shows the NetBeans IDE interface with a project named "modul4". The "Source Packages" node contains several Java files: DefaultModifier, demoDefaultModifier.java, modul4, Module4.java, defaultModifier.java, defaultModifierDemo.java, demoPrivateModifier.java, privateModifier.java, protectedModifier.java, and publicModifier.java. The "privateModifier.java" file is open in the editor. The code defines a class named "privateModvier" with a private attribute "name" and a private method "printInfo()". The "private" keyword is underlined with a red squiggle, indicating a syntax error.

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

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



The screenshot shows the NetBeans IDE interface with the same project structure as the previous screenshot. The "demoPrivateModifier.java" file is open in the editor. It contains a main method that creates an instance of "privateModvier" and calls its "printInfo()" method. The "private" keyword in the class definition is underlined with a red squiggle, indicating a syntax error.

```
1  /* To change this license header, choose License Headers in Project Properties.
2  * To change this template file, choose Tools | Templates
3  * and open the template in the editor.
4  */
5  package modul4;
6
7  /**
8  *
9  * @author LABRPL-32
10 */
11 public class demoPrivateModifier {
12     public static void main(String[] args) {
13         privateModvier pm = new privateModvier();
14         pm.printInfo();
15     }
16 }
17
```

DEFAULT MODIFIER

The screenshot shows the NetBeans IDE 8.2 interface. The Projects panel on the left lists a project named 'modul4' containing several Java files: DefaultModifier, demoDefaultModifier.java, Modul4.java, defaultModifier.java, defaultModifierDemo.java, demoPrivateModifier.java, privateModifier.java, protectedModifier.java, and publicModifier.java. The Source editor on the right displays the code for 'defaultModifier.java'. The code defines a class 'defaultModifier' with a constructor that initializes three integer fields (a, b, c) to 1, 2, and 3 respectively. It also contains a method 'jumlah()' that adds the values of 'a' and 'b' and prints the result. The Navigator panel below the source editor shows the members of the 'defaultModifier' class.

```
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  *  
10 * @author LABRPL-32  
11 */  
12 class defaultModifier {  
13     int a = 1;  
14     int b = 2;  
15     int c;  
16     void jumlah(){  
17         c = a + b;  
18         System.out.println(c);  
19     }  
20 }  
21  
22
```

The screenshot shows the NetBeans IDE 8.2 interface. The Projects panel on the left lists a project named 'modul4' containing Java files: DefaultModifier, demoDefaultModifier.java, Modul4.java, defaultModifier.java, defaultModifierDemo.java, demoPrivateModifier.java, privateModifier.java, protectedModifier.java, and publicModifier.java. The Source editor on the right displays the code for 'defaultModifierDemo.java'. The code defines a public static main() method that creates an instance of 'defaultModifier' and calls its 'jumlah()' method. The Output panel at the bottom shows the build log: 'run: 3 BUILD SUCCESSFUL (total time: 0 seconds)'.

```
1 /*  
2  * To change this license header, choose License Headers in Project Properties.  
3  * To change this template file, choose Tools | Templates  
4  * and open the template in the editor.  
5 */  
6 package modul4;  
7  
8 /**  
9  *  
10 * @author LABRPL-32  
11 */  
12 public class defaultModifierDemo {  
13     public static void main(String[] args){  
14         defaultModifier dm = new defaultModifier();  
15         dm.jumlah();  
16     }  
17 }  
18  
19  
20 }
```

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

```

NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
...av defaultModifier.java publicModifier.java demoPrivateModifier.java defaultModifierDemo.java demoDefaultModifier.java
Projects Files Services
modul4
Source Packages
  DefaultModifier
    demoDefaultModifier.java
  modul4
    Module4.java
    defaultModifier.java
    defaultModifierDemo.java
    demoPrivateModifier.java
    privateModifier.java
    protectedModifier.java
    publicModifier.java
Test Packages
Libraries
Test Libraries
Navigator
Members <empty>
  demoDefaultModifier
    main(String[] args)
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 DefaultModifier;
7
8 /**
9  *
10 * @author LABRPL-32
11 */
12 public class demoDefaultModifier {
13     public static void main(String[] args) {
14         defaultModifier dm = new defaultModifier();
15         dm.jumlah();
16     }
17 }
18
19
20
21

```

8:1 3:24 PM 10/4/2019

PROTECTED MODIFIER

```

NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
...av protectedModifier.java defaultModifier.java publicModifier.java demoPrivateModifier.java defaultModifierDemo.java de...
Projects Files Services
modul4
Source Packages
  DefaultModifier
    demoDefaultModifier.java
  modul4
    Module4.java
    defaultModifier.java
    defaultModifierDemo.java
    demoPrivateModifier.java
    privateModifier.java
    protectedModifier.java
    publicModifier.java
Test Packages
Libraries
Test Libraries
Navigator
Members <empty>
  protectedModifier
    printInfo()
    sendMessage()
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 modul4;
7
8 /**
9  *
10 * @author LABRPL-32
11 */
12 public class protectedModifier {
13     protected void printInfo(){
14         System.out.println("Protected Modifier");
15     }
16     protected void sendMessage(){
17         System.out.println("this is message");
18     }
19 }
20

```

17:47 3:27 PM 10/4/2019

The screenshot shows the NetBeans IDE interface with the title "modul4 - NetBeans IDE 8.2". The Projects panel on the left lists several Java files under "Source Packages" and "modul4". The "demoProtectedModifier.java" file is open in the Source editor. The code defines a class "demoProtectedModifier" with a static main method that creates an instance of "protectedModifier" and calls its "printInfo" and "sendMessage" methods. The Output window shows the run results: "Protected Modifier", "this is message", and "BUILD SUCCESSFUL (total time: 0 seconds)".

```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6 package modul4;
7
8 /**
9 *
10 * @author LABRPL-32
11 */
12 public class demoProtectedModifier {
13     public static void main(String[] args) {
14         protectedModifier pro = new protectedModifier();
15         pro.printInfo();
16         pro.sendMessage();
17     }
18 }
19
20
```

Output - modul4 (run) :

```
run:
Protected Modifier
this is message
BUILD SUCCESSFUL (total time: 0 seconds)
```

PUBLIC MODIFIER

- Kali

The screenshot shows the NetBeans IDE interface with the title "modul4 - NetBeans IDE 8.2". The Projects panel on the left lists several Java files under "Source Packages" and "modul4". The "demoPublicModifier.java" file is open in the Source editor. The code defines a class "demoPublicModifier" with a static main method that creates an instance of "publicModifier" and calls its "kali" method. The Output window shows the run results: "Basic kali = 90" and "BUILD SUCCESSFUL (total time: 0 seconds)".

```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6 package modul4;
7
8 /**
9 *
10 * @author LABRPL-32
11 */
12 public class demoPublicModifier {
13     public static void main(String[] args) {
14         publicModifier pp = new publicModifier();
15         pp.kali();
16     }
17 }
18
19
```

Output - modul4 (run) :

```
run:
Basic kali = 90
BUILD SUCCESSFUL (total time: 0 seconds)
```

- Tambah, kurang, bagi, Rata rata

```

NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
...java publicModifier.java demoPrivateModifier.java defaultModifierDemo.java demoDefaultModifier.java demoPublicModifier.java
Projects Files Services
modul4
Source Packages
  DefaultModifier
    demoDefaultModifier.java
  modul4
    Modul4.java
    defaultModifier.java
    defaultModifierDemo.java
    demoPrivateModifier.java
    demoPublicModifier.java
    privateModifier.java
    protectedModifier.java
    publicModifier.java
Test Packages
Libraries
Test Libraries
Source History ...
publicModifier {
    /*
     * @author LABRPL-32
     */
    public class publicModifier {
        public int a = 2;
        public int b = 5;
        public int c = 9;
        public void kali(){
            int d = a*b*c;
            System.out.println("Hasil kali = " + d);
        }
        public void tambah(){
            int d = a+b+c;
            System.out.println("Hasil tambah = " + d);
        }
        public void kurang(){
            int d = a-b-c;
            System.out.println("Hasil kurang = " + d);
        }
        public void bagi(){
            int d = a/b/c;
            System.out.println("Hasil bagi = " + d);
        }
        public void ratarata(){
            int d = (a+b+c)/3;
            System.out.println("Hasil Rata rata = " + d);
        }
    }
}
modul4.publicModifier > ratarata

```

34:44 3:45 PM 10/4/2019

- Hasil

```

modul4 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
...java publicModifier.java demoPrivateModifier.java defaultModifierDemo.java demoDefaultModifier.java demoPublicModifier.java
Projects Files Services
modul4
Source Packages
  DefaultModifier
    demoDefaultModifier.java
  modul4
    Modul4.java
    defaultModifier.java
    defaultModifierDemo.java
    demoPrivateModifier.java
    demoPublicModifier.java
    privateModifier.java
    protectedModifier.java
    publicModifier.java
Test Packages
Libraries
Test Libraries
Source History ...
demoPublicModifier {
    /**
     * 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 modul4;
    /*
     * @author LABRPL-32
     */
    public class demoPublicModifier {
        public static void main(String[] args) {
            publicModifier pp = new publicModifier();
            pp.kali();
            pp.tambah();
            pp.kurang();
            pp.bagi();
            pp.ratarata();
        }
    }
}
modul4.demoPublicModifier > main
Output - modul4 (run):
RUN:
Hasil kali = 90
Hasil tambah = 16
Hasil kurang = -12
Hasil bagi = 0
Hasil Rata rata = 5
BUILD SUCCESSFUL (total time: 0 seconds)

```

19:23 3:45 PM 10/4/2019

➤ Modul 5

- Latihan 1

The screenshot shows the NetBeans IDE interface. The title bar reads "Modul 5 - NetBeans IDE 8.2". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has icons for New Project, Open Project, Save, Run, Stop, and others. The Projects tab in the Navigator shows various Java projects like annun, BAB5, CarDemo, Constructor, erdy, gudd, JavaApplication17, modul, Modul 4.7, Modul 48, and Modul 5. The Files tab shows Source Packages, Test Packages, Libraries, and Test Libraries. The central editor pane displays the code for DefaultConstructor.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 modul.pkg5;
7
8  /**
9  *
10 * @author Hp-One
11 */
12 public class DefaultConstructor {
13     String nama = "Aulia Yogatama";
14     String nim = "L200180081";
15     String Alamat = "Perum GPI Papahan";
16     public DefaultConstructor() {
17         System.out.println(
18             "Nama = "+ nama +"\n"+
19             "NIM = "+ nim +"\n" +
20             "Alamat ="+ Alamat+"\n"
21         );
22     }
23 }
24
25 }
```

The screenshot shows the NetBeans IDE interface again. The title bar reads "Modul 5 - NetBeans IDE 8.2". The central editor pane displays the code for Modul5.java:

```
3  /*
4  * To change this template file, choose Tools | Templates
5  * and open the template in the editor.
6  */
7  package modul.pkg5;
8
9  /**
10 * @author Hp-One
11 */
12 public class Modul5 {
13
14     /**
15      * @param args the command line arguments
16     */
17     public static void main(String[] args) {
18         DefaultConstructor dc = new DefaultConstructor();
19     }
20 }
21
22 }
```

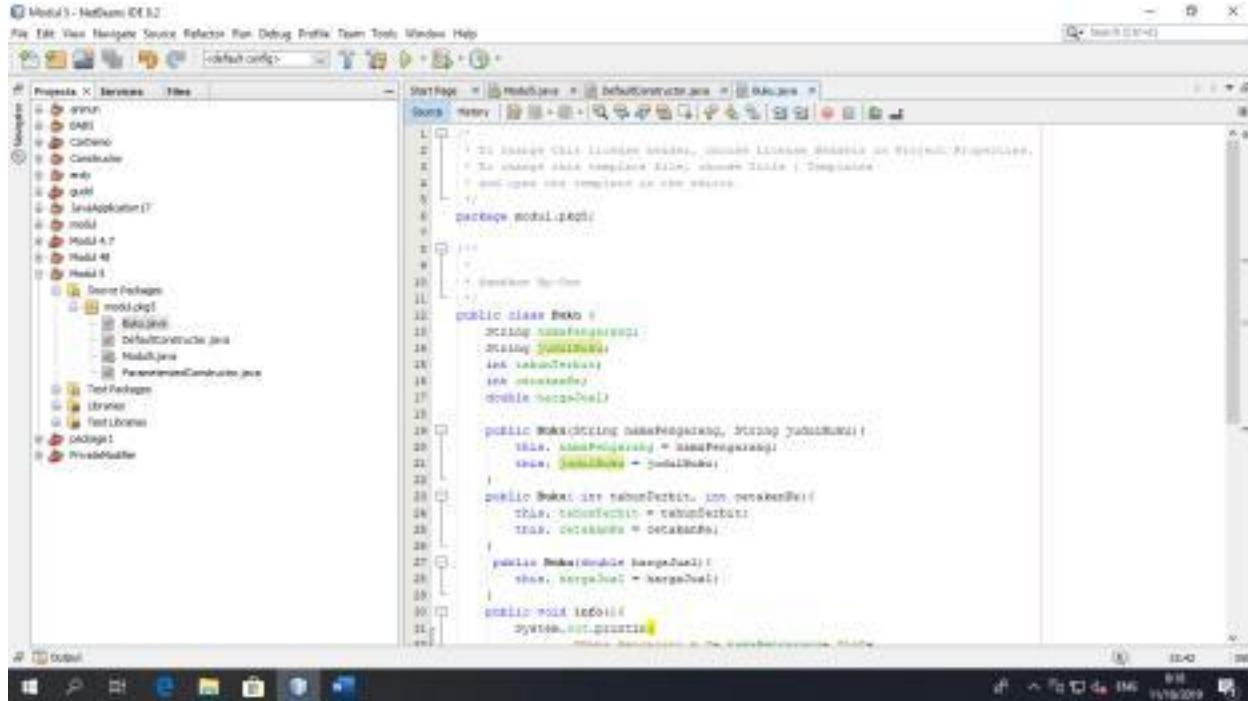
The Output window at the bottom left shows the run results:

```
run:
Nama = Aulia Yogatama
NIM = L200180081
Alamat =Perum GPI Papahan

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

- Latihan 2

1. Membuat class Buku dan 3 Constructor



Modul 5 - NetBeans IDE 8.2

```

13     String namaPengarang;
14     String judulBuku;
15     int tahunTerbit;
16     int cetakanKe;
17     double hargaJual;
18
19     public Buku(String namaPengarang, String judulBuku){
20         this.namaPengarang = namaPengarang;
21         this.judulBuku = judulBuku;
22     }
23     public Buku( int tahunTerbit, int cetakanKe){
24         this.tahunTerbit = tahunTerbit;
25         this.cetakanKe = cetakanKe;
26     }
27     public Buku(double hargaJual){
28         this.hargaJual = hargaJual;
29     }
30     public void info(){
31         System.out.println(
32             "Nama Pengarang = "+namaPengarang+ "\n"+
33             "Judul Buku = "+judulBuku);
34     }
35     public void infoTerbit(){
36         System.out.println("Tahun Terbit =" +tahunTerbit+ "\n"+
37             "Cetakan Ke = " + cetakanKe);
38     }
39     public void infoHarga(){
40         System.out.println( "Harga Jual = "+ hargaJual
41         );
42     }
43 }

```

- Hasil

Modul 5 - NetBeans IDE 8.2

```

7 /**
8  * @author Hp-One
9 */
10 public class Modul5 {
11
12     /**
13      * @param args the command line arguments
14     */
15     public static void main(String[] args) {
16         Buku B = new Buku("J.K Rowling", "Harry Potter");
17         Buku B1 = new Buku(2000, 3);
18         Buku B2 = new Buku(120000);
19         B.info();
20         B1.infoTerbit();
21         B2.infoHarga();
22     }
23 }
24
25
26

```

Output - Modul 5 (run)

```

run:
Nama Pengarang = J.K Rowling
Judul Buku = Harry Potter
Tahun Terbit = 2000
Cetakan Ke = 3
Harga Jual = 120000.0
BUILD SUCCESSFUL (total time: 0 seconds)

```

2. Membuat 10 Variable

Modul 5 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

Buku.java

```
1 package modul.pkg5;
2
3 public class Buku {
4     String namaPengarang;
5     String judulBuku;
6     int tahunTerbit;
7     int cetakanKe;
8     double hargaJual;
9
10    public Buku(String namaPengarang, String judulBuku) {
11        this.namaPengarang = namaPengarang;
12        this.judulBuku = judulBuku;
13    }
14    public Buku(int tahunTerbit, int cetakanKe) {
15        this.tahunTerbit = tahunTerbit;
16        this.cetakanKe = cetakanKe;
17    }
18    public Buku(double hargaJual) {
19        this.hargaJual = hargaJual;
20    }
21    public void info() {
22        System.out.println(
23            "Nama Pengarang = " + namaPengarang + "\n" +
24            "Judul Buku = " + judulBuku);
25    }
26    public void infoTerbit() {
27        System.out.println("Tahun Terbit = " + tahunTerbit + "\n" +
28            "Cetakan Ke = " + cetakanKe);
29    }
30    public void infoHarga() {
31        System.out.println("Harga Jual = " + hargaJual + "\n");
32    }
33}
34
35}
36}
```

Output

8:34 11/10/2019 INS

Modul 5 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

Buku.java

```
16    this.tahunTerbit = tahunTerbit;
17    this.cetakanKe = cetakanKe;
18
19    public Buku(double hargaJual) {
20        this.hargaJual = hargaJual;
21    }
22
23    public void info() {
24        System.out.println(
25            "Nama Pengarang = " + namaPengarang + "\n" +
26            "Judul Buku = " + judulBuku);
27
28    public void infoTerbit() {
29        System.out.println("Tahun Terbit = " + tahunTerbit + "\n" +
30            "Cetakan Ke = " + cetakanKe);
31
32    public void infoHarga() {
33        System.out.println("Harga Jual = " + hargaJual + "\n");
34    }
35}
36}
```

Output

8:35 11/10/2019 INS

- Hasil

```

1 package modul.pkg5;
2 public class Modul5 {
3     public static void main(String[] args) {
4         Buku B = new Buku("J.K Rowling", "Harry Potter");
5         Buku B1 = new Buku(2000, 3);
6         Buku B2 = new Buku(120000);
7
8         Buku B3 = new Buku("Rick Riordan", "Percy Jackson and The Olympians");
9         Buku B4 = new Buku(2005, 1);
10        Buku B5 = new Buku(69000);
11
12        Buku B6 = new Buku("Rick Riordan", "The Lost Hero");
13        Buku B7 = new Buku(2010, 1);
14        Buku B8 = new Buku(65000);
15
16        B.info();
17        B1.infoTerbit();
18        B2.infoHarga();
19
20        Buku B9 = new Buku("Rick Riordan", "The Sea of Monsters");

```

Output - Modul 5 (run)

```

run:
Nama Pengarang = J.K Rowling
Judul Buku = Harry Potter
Tahun Terbit =2000
Cetakan Ke = 3
Harga Jual = 120000.0

Nama Pengarang = Rick Riordan
Judul Buku = Percy Jackson and The Olympians
Tahun Terbit =2005
Cetakan Ke = 1
Harga Jual = 69000.0

```

- Tugas

1. Membuat Class yang memuat Default dan Parameterized Constructor

```

1 package modul.pkg5;
2 public class Constructor {
3     String nama, nim;
4     String kampus;
5     int semester;
6
7     public Constructor(){
8         System.out.println("Selamat Datang Peserta Test Toefl");
9     }
10    public Constructor(String nama, String nim, String kampus,int semester){
11        this. nama = nama;
12        this. nim = nim;
13        this .kampus = kampus;
14        this.semester = semester;
15    }
16    public void infoMHS(){
17        System.out.println(
18            "Nama = " + nama + "\n"+
19            "NIM = " + nim +"\n"+
20            "Universitas = " + kampus +" \n"+
21            "Semester = " + semester);
22    }
23
24

```

2. Menambahkan class berisi method main

Modul 5 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

Navigator

Modul 5

Source Packages modul.pkg5

- Buku.java
- Constructor.java
- ConstructorMain.java
- DefaultConstructor.java
- Modul5.java
- ParameterizedConstructor.java

Test Packages Libraries

Start Page Modul5.java DefaultConstructor.java Buku.java Constructor.java ConstructorMain.java

Source History

```
1 package modul.pkg5;
2 public class ConstructorMain {
3     public static void main(String[] args){
4         Constructor C = new Constructor();
5         Constructor C1 = new Constructor(
6             "Aulia Yogatama",
7             "L200180081",
8             "Universitas Muhammadiyah Surakarta",
9             3);
10        C1.infoMHS();
11    }
12}
13
```

Output - Modul 5 (run)

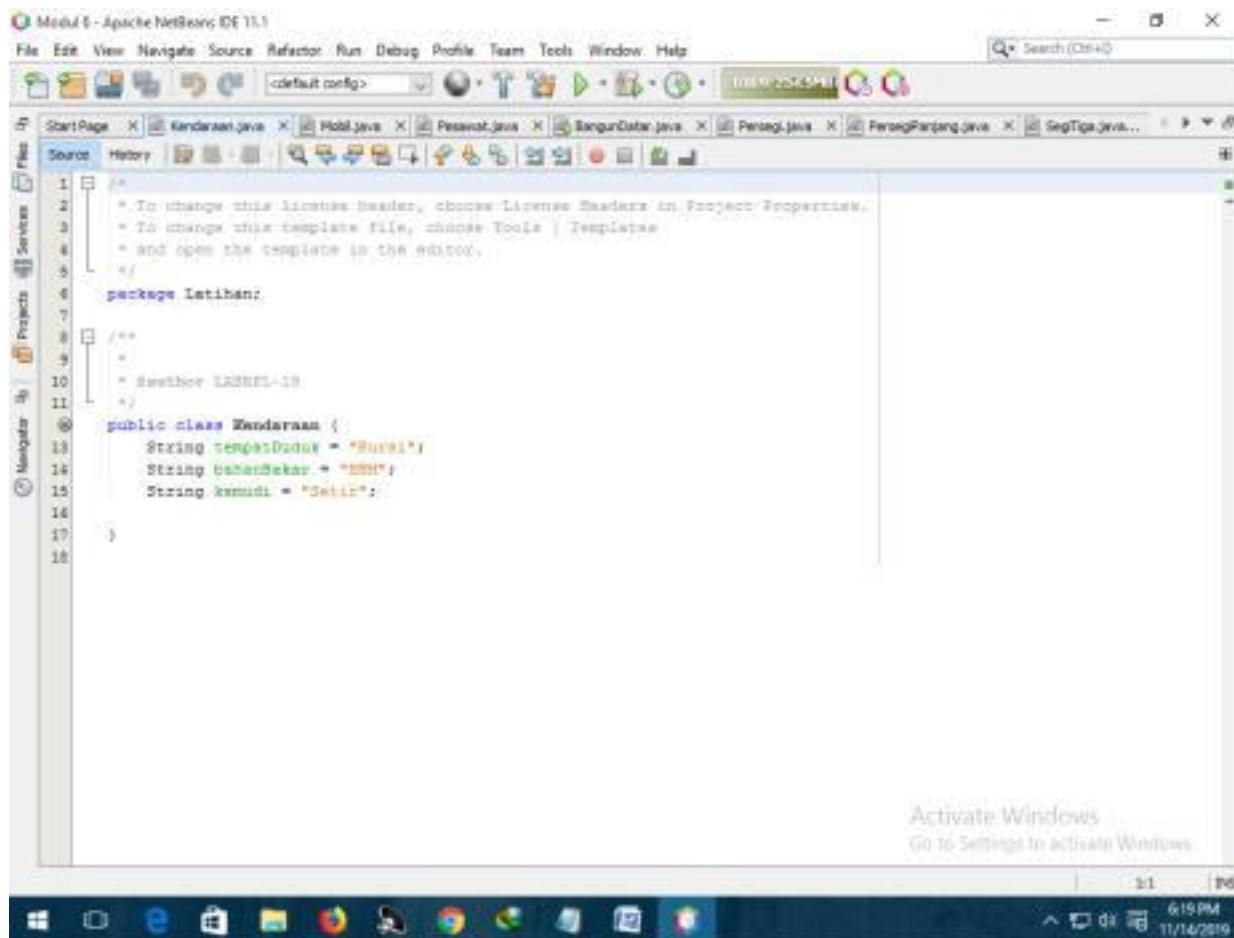
```
run:
Selamat Datang Reserta Test Toefl
Nama = Aulia Yogatama
NIN = L200180081
Universitas = Universitas Muhammadiyah Surakarta
Semester = 3
BUILD SUCCESSFUL (total time: 0 seconds)
```

Output Finished building Modul 5 (run).

10:22 850 ENG 11/10/2019

➤ Modul 6

Kendaraan.java

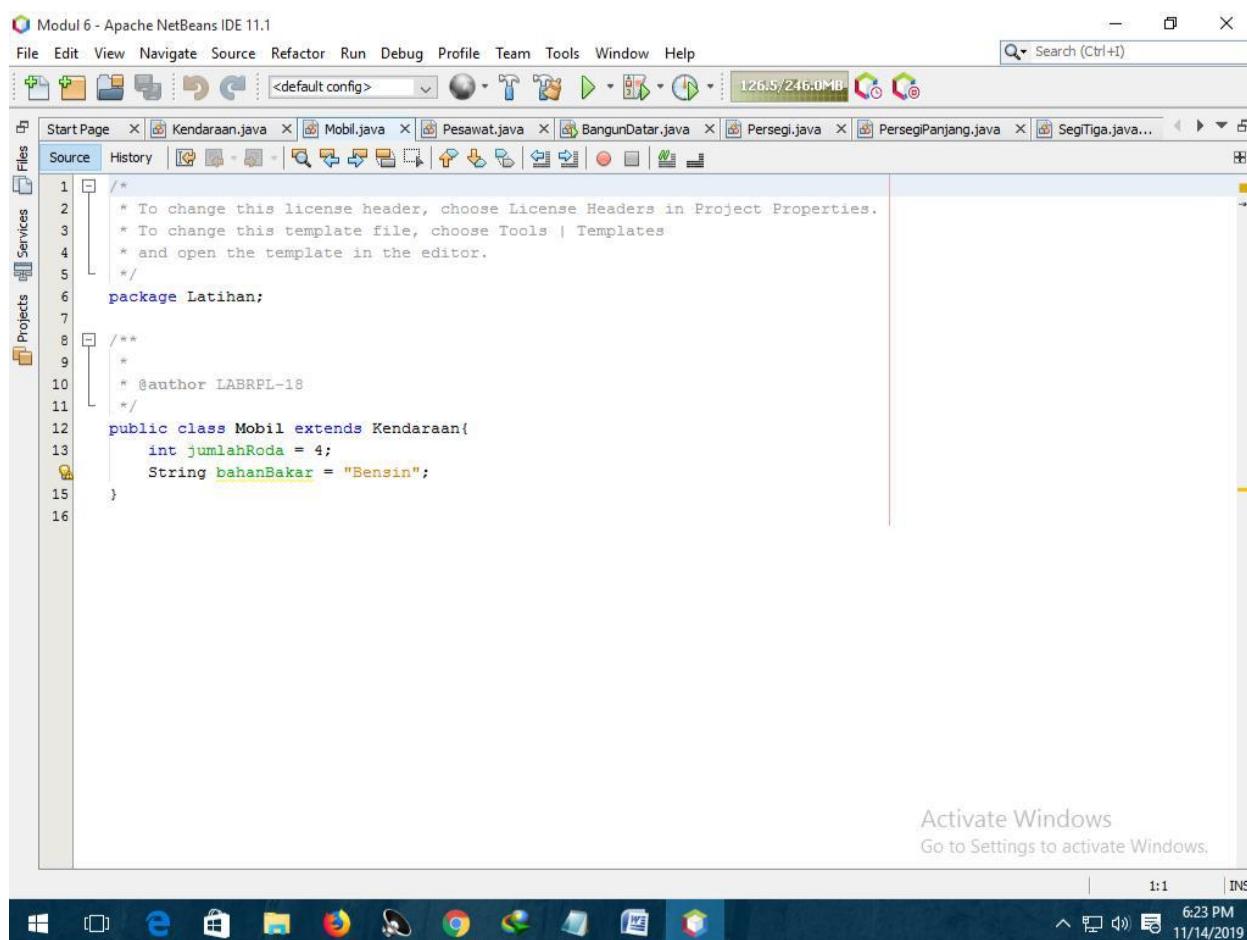


The screenshot shows the Apache NetBeans IDE 11.1 interface. The title bar reads "Modul 6 - Apache NetBeans IDE 11.1". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has various icons for file operations like Open, Save, Find, and Run. The main editor window displays the following Java code:

```
1 /**
 * 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.
 */
2 package Latihan;
3
4 /**
 * @author LABRPL-18
 */
5 public class Kendaraan {
6     String tempatDuduk = "Bersisi";
7     String bahanBakar = "BBM";
8     String remudi = "Setir";
9 }
10
11
12
13
14
15
16
17
18 }
```

The code defines a class named Kendaraan with three instance variables: tempatDuduk, bahanBakar, and remudi, each assigned a specific value.

Mobil.java



The screenshot shows the Apache NetBeans IDE 11.1 interface. The title bar reads "Modul 6 - Apache NetBeans IDE 11.1". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has various icons for file operations like Open, Save, Find, and Run. The main editor window displays the following Java code:

```
1 /**
 * 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.
 */
2 package Latihan;
3
4 /**
 * @author LABRPL-18
 */
5 public class Mobil extends Kendaraan{
6     int jumlahRoda = 4;
7     String bahanBakar = "Bensin";
8 }
9
10
11
12
13
14
15
16 }
```

The code defines a class named Mobil that extends the Kendaraan class. It adds an integer variable jumlahRoda set to 4 and a string variable bahanBakar set to "Bensin".

Pesawat.java

The screenshot shows the Apache NetBeans IDE 11.1 interface. The main window displays the code for the `Pesawat.java` file. The code defines a class `Pesawat` that extends `Kendaraan`. It contains two string fields: `caraBergerak` (set to "terbang") and `bahanBakar` (set to "Avtur"). The code is annotated with JavaDoc comments and a copyright notice.

```
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 LABRPL-18
11 */
12 public class Pesawat extends Kendaraan {
13     String caraBergerak = "terbang";
14     String bahanBakar = "Avtur";
15 }
16
```

The status bar at the bottom right shows the date and time: 11/14/2019, 6:24 PM. A watermark for "Activate Windows" is visible in the center of the screen.

Output

The screenshot shows the Apache NetBeans IDE 11.1 interface with the `Demo.java` file open. The code creates instances of `Mobil` and `Pesawat` and prints their properties using `System.out.println`. The output window below shows the results of the run, including the output of the `main` method and the build status.

```
8  /**
9  *
10 * @author LABRPL-18
11 */
12 public class Demo {
13     public static void main(String[] args){
14         Mobil mobil = new Mobil();
15         Pesawat pesawat = new Pesawat();
16         //Class Mobil
17         System.out.println("Cara bergerak mobil adalah " + mobil.jumlahRoda);
18         System.out.println("Bahan bakar mobil adalah " + mobil.bahanBakar);
19         System.out.println("Tempat duduk mobil berupa " + mobil.tempatDuduk);
20         System.out.println("Jenis kemudi mobil adalah " + mobil.kemudi + "\n");
21         //Class Pesawat
22         System.out.println("Cara bergerak pesawat adalah " + pesawat.caraBergerak);
23         System.out.println("Bahan bakar pesawat adalah " + pesawat.bahanBakar);
24         System.out.println("Tempat duduk pesawat berupa " + pesawat.tempatDuduk);
25         System.out.println("Jenis kemudi pesawat adalah " + pesawat.kemudi);
26     }
27 }
```

The output window shows the following text:

```
Cara bergerak mobil adalah 4
Bahan bakar mobil adalah Bensin
Tempat duduk mobil berupa Kursi
Jenis kemudi mobil adalah Setir

Cara bergerak pesawat adalah terbang
Bahan bakar pesawat adalah Avtur
Tempat duduk pesawat berupa Kursi
Jenis kemudi pesawat adalah Setir
BUILD SUCCESSFUL (total time: 1 second)
```

The status bar at the bottom right shows the date and time: 11/14/2019, 6:25 PM. A watermark for "Activate Windows" is visible in the center of the screen.

Tugas

Modul 6 - Apache NetBeans IDE 11.1

```
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
193.7/243.0MB Q C G
Start Page X Kendaraan.java X Mobil.java X Pesawat.java X Demo.java X BangunDatar.java X Persegi.java X PersegiPanjang.java...
Source History | 
Projects Services Files
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 LABRPL-18
11 */
12 public class BangunDatar {
13     protected double luas;
14     protected double keliling;
15     protected void hitungLuas(){
16         System.out.println(luas);
17     }
18
19     protected void hitungKeliling(){
20         System.out.println(keliling);
21     }
22
23     public static void main(String[] args){
24         Persegi persegi = new Persegi();
25         persegi.luas();
26         persegi.keliling();
27     }
28 }
29
```

Activate Windows
Go to Settings to activate Windows.

Output 1:1 INS 6:30 PM 11/14/2019

Modul 6 - Apache NetBeans IDE 11.1

```
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
197.9/241.5MB Q C G
Start Page X Kendaraan.java X Mobil.java X Pesawat.java X Demo.java X BangunDatar.java X Persegi.java X PersegiPanjang.java...
Source History | 
Projects Services Files
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 LABRPL-18
11 */
12 public class Persegi extends BangunDatar{
13     protected double sisi = 50;
14     void luas(){
15         luas = sisi*sisi;
16         System.out.println("Luas persegi adalah = " + luas);
17     }
18     void keliling(){
19         keliling = sisi+sisi+sisi+sisi;
20         System.out.println("Keliling persegi adalah = " + keliling);
21     }
22 }
```

Activate Windows
Go to Settings to activate Windows.

Output 1:1 INS 6:30 PM 11/14/2019

Modul 6 - Apache NetBeans IDE 11.1

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

156.4/244.0MB

Search (Ctrl+I)

...age Kendaraan.java X Mobil.java X Pesawat.java X Demo.java X BangunDatar.java X Persegi.java X PersegiPanjang.java X Segi... X

Source History

```
1 /**
 * 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 Tugas;

/**
 *
 * @author LABRPL-18
 */
public class PersegiPanjang extends BangunDatar{
    protected int panjang;
    protected double lebar;
    void luas(){
        luas = panjang*lebar;
    }
}
```

Activate Windows
Go to Settings to activate Windows.

Output

1:1 INS

6:31 PM 11/14/2019

Modul 6 - Apache NetBeans IDE 11.1

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

180.7/246.5MB

Search (Ctrl+I)

...Java Kendaraan.java X Mobil.java X Pesawat.java X Demo.java X BangunDatar.java X Persegi.java X PersegiPanjang.java X SegiTiga.java X SegiTigaSamaKaki.java...

Source History

```
1 /**
 * 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 Tugas;

/**
 *
 * @author LABRPL-18
 */
public class SegiTiga extends BangunDatar{
    protected double alas;
    protected double tinggi;
    void luas(){
        luas = (alas*tinggi)/2;
        System.out.println("Luas segitiga adalah = "+ luas);
    }
}
```

Activate Windows
Go to Settings to activate Windows.

Output

11:4 INS

6:33 PM 11/14/2019

Modul 6 - Apache NetBeans IDE 11.1

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

Search (Ctrl+I)

213.0/247.0MB

...ave Demo.java BangunDatar.java Persegi.java PersegiPanjang.java SegiTiga.java SegiTigaSamaKaki.java SegiTigaSamaSisi.java

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 LABRPL-18
11 */
12 public class SegiTigaSamaKaki extends SegiTiga{
13     protected double sisimiring;
14 }
15
```

Activate Windows
Go to Settings to activate Windows.

Output

1:1 INS

6:35 PM 11/14/2019

Modul 6 - Apache NetBeans IDE 11.1

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

Search (Ctrl+I)

206.6/248.5MB

...ave BangunDatar.java Persegi.java PersegiPanjang.java SegiTiga.java SegiTigaSamaKaki.java SegiTigaSamaSisi.java

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 LABRPL-18
11 */
12 public class SegiTigaSamaSisi extends SegiTiga{
13     protected double sisi;
14 }
15
```

Activate Windows
Go to Settings to activate Windows.

Output

1:1 INS

6:35 PM 11/14/2019

Output

Modul 6 - Apache NetBeans IDE 11.1

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

191.3/251.0MB

...ava BangunDatar.java Persegi.java PersegiPanjang.java SegTiga.java SegTigaSamaKaki.java SegTigaSamaSisi.java

Source History

```
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 LABRPL-18
11 */
12 public class Persegi extends BangunDatar{
13     protected double sisi = 50;
14     void luas(){
15         luas = sisi*sisi;
16         System.out.println("Luas persegi adalah = " + luas);
17     }
18     void keliling(){
19         keliling = sisi+sisi+sisi+sisi;
20         System.out.println("Keliling persegi adalah = " + keliling);
21     }
22 }
```

Output - Modul 6 (run)

```
run:
Luas persegi adalah = 2500.0
Keliling persegi adalah = 200.0
BUILD SUCCESSFUL (total time: 2 seconds)
```

Activate Windows
Go to Settings to activate Windows.

1:1 INS

6:36 PM 11/14/2019

➤ Modul 7

Modul 7 - NetBeans IDE 8.2

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

Search (Ctrl+I)

Source History

Start Page Karyawan.java KaryawanDemo.java Manager.java Demo.java

Files Services Projects

Source Packages modul.pkg7 Demo.java Karyawan.java KaryawanDemo.java Manager.java Modul7.java Test Packages Libraries Test Libraries

```
4  * and open the template in the editor.
5  */
6  package modul.pkg7;
7
8  /**
9   *
10  * @author Hp-One
11  */
12 public class Karyawan {
13     private String nama;
14     private float gaji;
15     private int usia;
16
17     public String getNama(){
18         return nama;
19     }
20
21     public void setNama(String nama){
22         this.nama = nama;
23     }
24
25     public float getGaji(){
26         return gaji;
27     }
28
29     public void setGaji (float gaji){
30         this.gaji = gaji;
31     }
32
33     public int getUsia(){
34         return usia;
35     }
36
37     public void setUsia (int usia){
38         this.usia = usia;
39     }
40 }
```

15:22 | INS

Modul 7 - NetBeans IDE 8.2

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

Search (Ctrl+I)

Source History

Start Page Karyawan.java KaryawanDemo.java Manager.java Demo.java

Files Services Projects

Source Packages modul.pkg7 Demo.java Karyawan.java KaryawanDemo.java Manager.java Modul7.java Test Packages Libraries Test Libraries

```
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 modul.pkg7;
7
8  /**
9   *
10  * @author Hp-One
11  */
12 public class KaryawanDemo {
13     public static void main(String[] args ){
14         Karyawan kl = new Karyawan();
15         kl.setNama("Yoga");
16         kl.setGaji(2500000);
17         kl.setUsia(20);
18
19         System.out.println(kl.getNama ());
20         System.out.println(kl.getGaji ());
21         System.out.println(kl.getUsia ());
22     }
23
24 }
25 }
```

17:24 | INS

Modul 7 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Source History

Start Page Karyawan.java KaryawanDemo.java Manager.java Demo.java

Files Services Projects

Source Packages Test Packages Libraries Test Libraries

Modul 7

Source Packages

modul.pkg7

Demo.java Karyawan.java KaryawanDemo.java Manager.java Modul7.java

Test Packages

modul8

Pegawai Pet RemidiUTS Tugas UT UTS utb0018 UTPB0

Modul 6

Modul 5

Modul 4

Inheritance1 JavaApplication19 JavaApplication26 Karyawan

Modul 3

Modul 2

Modul 1

airconditioner Cardemo Inheritance Demo.java Manager.java Karyawan.java KaryawanDemo.java Manager.java Modul7.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 modul.pkg7;
7
8 /**
9 * @author Hp-One
10 */
11 public class Manager extends Karyawan {
12 private float jamKerja = 7.5f;
13
14 public float jamKerja() {
15 return jamKerja;
16 }
17
18 public float getGajiManager() {
19 return getGaji() * 2;
20 }
21
22 public void setjamKerja() {
23 this.jamKerja = 8.5f;
24 }
25 }
26

22:28 INS

Modul 7 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Source History

Start Page Karyawan.java KaryawanDemo.java Manager.java Demo.java

Files Services Projects

Source Packages Test Packages Libraries Test Libraries

Modul 7

Source Packages

modul.pkg7

Demo.java Karyawan.java KaryawanDemo.java Manager.java Modul7.java

Test Packages

modul8

Pegawai Pet RemidiUTS Tugas UT UTS utb0018 UTPB0

Modul 6

Modul 5

Modul 4

Inheritance1 JavaApplication19 JavaApplication26 Karyawan

Modul 3

Modul 2

Modul 1

airconditioner Cardemo Inheritance Demo.java Manager.java Karyawan.java KaryawanDemo.java Manager.java Modul7.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 modul.pkg7;
7
8 /**
9 * @author Hp-One
10 */
11 public class Demo {
12 public static void main(String[] args) {
13 Manager m1 = new Manager();
14 m1.setNama("Aulia");
15 m1.setGaji(4000000);
16 m1.setUsia(30);
17 m1.setjamKerja();
18 System.out.println("Nama : " + m1.getNama());
19 System.out.println("Gaji : " + m1.getGajiManager());
20 System.out.println("Usia : " + m1.getUsia());
21 System.out.println("Jam Kerja : " + m1.jamKerja() + "\n");
22 Manager m2 = new Manager();
23
24 m2.setNama("Yoga");
25 m2.setGaji(5000000);
26 m2.setUsia(20);
27 m2.setjamKerja();
28 System.out.println("Nama : " + m2.getNama());
29 System.out.println("Gaji : " + m2.getGajiManager());
30 System.out.println("Usia : " + m2.getUsia());
31 System.out.println("Jam Kerja : " + m2.jamKerja() + "\n");
32 }
33 }
56:21 INS

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

- Title Bar:** Modul 7 - NetBeans IDE 8.2
- Menu Bar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Toolbar:** Includes icons for file operations like Open, Save, Find, and Run.
- Project Explorer:** On the left, it lists various projects and files under "Modul 7".
- Code Editor:** The main window displays Java code for the Manager class, which has multiple inheritance from Manager1, Manager2, and Manager3. The code prints out the name, salary, age, and working hours for three different Manager objects (m3, m4, m5).
- Status Bar:** Shows the time as 56:21 and the language as ENG 1543.

```
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
<default config> T K Karyawan.java KaryawanDemo.java Manager.java Demo.java
Files Services Projects Source History Search (Ctrl+I)
airconditioner
CarDemo
inheritance
Inheritance1
JavaApplication19
JavaApplication26
Karyawan
Modul 5
Modul 6
modul7
Modul 7
modul8
Pegawai
Pet
RemidiUTS
Tugas
UT
UTS
uts0018
UTSPBO

34     Manager m3 = new Manager();
35     m3.setNama("Tans");
36     m3.setGaji(300000);
37     m3.setUsia(21);
38     m3.setjamKerja();
39     System.out.println("Nama : " + m3.getNama());
40     System.out.println("Gaji : " + m3.getGajiManager());
41     System.out.println("Usia : " + m3.getUsia());
42     System.out.println("Jam Kerja : " + m3.jamKerja() + "\n");
43
44     Manager m4 = new Manager();
45     m4.setNama("Budi");
46     m4.setGaji(4500000);
47     m4.setUsia(25);
48     m4.setjamKerja();
49     System.out.println("Nama : " + m4.getNama());
50     System.out.println("Gaji : " + m4.getGajiManager());
51     System.out.println("Usia : " + m4.getUsia());
52     System.out.println("Jam Kerja : " + m4.jamKerja() + "\n");
53
54     Manager m5 = new Manager();
55     m5.setNama("Andi");
56     m5.setGaji(2000000);
57     m5.setUsia(25);
58     m5.setjamKerja();
59     System.out.println("Nama : " + m5.getNama());
60     System.out.println("Gaji : " + m5.getGajiManager());
61     System.out.println("Usia : " + m5.getUsia());
62     System.out.println("Jam Kerja : " + m5.jamKerja() + "\n");
63
64 }
65 }
```

Output

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

- Title Bar:** Modul 7 - NetBeans IDE 8.2
- Menu Bar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Toolbar:** Includes icons for New, Open, Save, Cut, Copy, Paste, Find, and others.
- Project Explorer:** Shows packages like airconditioner, CarDemo, inheritance, Inheritance1, JavaApplication19, JavaApplication26, Karyawan, Modul 5, Modul 6, modul7, and Modul 7. Under Modul 7, there are Source Packages (modul.pkg7 containing Demo.java, Karyawan.java, KaryawanDemo.java, Manager.java, and Modul7.java) and Test Packages (modul8 and Pegawai).
- Code Editor:** Displays the KaryawanDemo.java file with the following code:

```
4 * and open the template in the editor.
5 */
6 package modul.pkg7;
7
8 /**
9 *
10 * @author Hp-One
11 */
12
13 public class KaryawanDemo {
14     public static void main(String[] args) {
15         Karyawan kl = new Karyawan();
16         kl.setNama("Yoga");
17         kl.setGaji(2500000);
18         kl.setUsia(20);
19
20         System.out.println("Nama Karyawan : " + kl.getNama());
21         System.out.println("Gaji : " + kl.getGaji());
22         System.out.println("Usia : " + kl.getUsia());
23     }
24 }
```
- Output:** Shows the output of running Modul 7 (run). The output window displays:

```
RUN:
Nama Karyawan : Yoga
Gaji : 2500000.0
Usia : 20
BUILD SUCCESSFUL (total time: 0 seconds)
```
- Bottom Status Bar:** Shows the status bar with icons for search, help, and other tools, along with the time (21:40) and date (ENG 15/27).

Modul 7 - NetBeans IDE 8.2

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

default config <Start Page Karyawan.java KaryawanDemo.java Manager.java Demo.java >

Files Services Projects X

Source History

Manager m3 = new Manager();
m3.setNama("Tama");
m3.setGaji(3000000);
m3.setUsia(21);
m3.setjamKerja();
System.out.println("Nama : " + m3.getNama());
System.out.println("Gaji : " + m3.getGajiManager());
System.out.println("Usia : " + m3.getUsia());
System.out.println("Jam Kerja : " + m3.jamKerja() + "\n");

Manager m4 = new Manager();
m4.setNama("Budi");
m4.setGaji(4500000);
m4.setUsia(25);
m4.setjamKerja();
System.out.println("Nama : " + m4.getNama());
System.out.println("Gaji : " + m4.getGajiManager());
System.out.println("Usia : " + m4.getUsia());
System.out.println("Jam Kerja : " + m4.jamKerja() + "\n");

Manager m5 = new Manager();

Output - Modul 7 (run)

```
run:  
Nama : Aulia  
Gaji : 8000000.0  
Usia : 30  
Jam Kerja : 8.5  
  
Nama : Yoga  
Gaji : 1.0E7  
Usia : 20  
Jam Kerja : 8.5
```

Output

56:21 INS

Modul 7 - NetBeans IDE 8.2

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

default config <Start Page Karyawan.java KaryawanDemo.java Manager.java Demo.java >

Files Services Projects X

Source History

Manager m3 = new Manager();
m3.setNama("Tama");
m3.setGaji(3000000);
m3.setUsia(21);
m3.setjamKerja();
System.out.println("Nama : " + m3.getNama());
System.out.println("Gaji : " + m3.getGajiManager());
System.out.println("Usia : " + m3.getUsia());
System.out.println("Jam Kerja : " + m3.jamKerja() + "\n");

Manager m4 = new Manager();
m4.setNama("Budi");
m4.setGaji(4500000);
m4.setUsia(25);
m4.setjamKerja();
System.out.println("Nama : " + m4.getNama());
System.out.println("Gaji : " + m4.getGajiManager());
System.out.println("Usia : " + m4.getUsia());
System.out.println("Jam Kerja : " + m4.jamKerja() + "\n");

Manager m5 = new Manager();

Output - Modul 7 (run)

```
run:  
Nama : Tama  
Gaji : 6000000.0  
Usia : 21  
Jam Kerja : 8.5  
  
Nama : Budi  
Gaji : 9000000.0  
Usia : 25  
Jam Kerja : 8.5
```

Output

56:21 INS

Modul 7 - NetBeans IDE 8.2

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

default config <default config>

Files Services Projects Start Page Karyawan.java KaryawanDemo.java Manager.java Demo.java

Source History

```
Manager m3 = new Manager();
m3.setNama("Tama");
m3.setGaji(3000000);
m3.setUsia(21);
m3.setJamKerja();
System.out.println("Nama : " + m3.getNama());
System.out.println("Gaji : " + m3.getGajiManager());
System.out.println("Usia : " + m3.getUsia());
System.out.println("Jam Kerja : " + m3.jamKerja() + "\n");

Manager m4 = new Manager();
m4.setNama("Budi");
m4.setGaji(4500000);
m4.setUsia(25);
m4.setJamKerja();
System.out.println("Nama : " + m4.getNama());
System.out.println("Gaji : " + m4.getGajiManager());
System.out.println("Usia : " + m4.getUsia());
System.out.println("Jam Kerja : " + m4.jamKerja() + "\n");

Manager m5 = new Manager();
```

Output - Modul 7 (run)

```
Gaji : 3000000.0
Usia : 21
Jam Kerja : 8.5

Nama : Andi
Gaji : 4000000.0
Usia : 25
Jam Kerja : 6.5
```

BUILD SUCCESSFUL (total time: 0 seconds)

Output

Windows Firewall ENG 1544

➤ Modul 8

- Pet.java

The screenshot shows the Apache NetBeans IDE 11.1 interface. The title bar reads "Polymorphism - Apache NetBeans IDE 11.1". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, and Help. The toolbar has various icons for file operations like Open, Save, and Print. The Projects tab shows a hierarchy of projects: FormLogin, Modul 6, PBOInterface, and Polymorphism. Under Polymorphism, there is a Source Packages folder containing files like Anjing.java, Bank.java, BankDemo.java, BankPasar.java, BankPribadi.java, BankSyariah.java, BankUmum.java, CustomerData.java, DemoCustomerData.java, DemoPet.java, Elang.java, Hewan.java, Kucing.java, Pet.java, and Polymorphism.java. The main editor window displays the Pet.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 * @author Hp-One
10 */
11 public class Pet {
12     private String nama;
13
14     public void beriNama(String beriNama) {
15         this.nama = beriNama;
16     }
17
18     public String panggilNama() {
19         return this.nama;
20     }
21
22     public String perilaku(){
23         return "Hewan Penurut";
24     }
25 }
26
27
```

The status bar at the bottom shows "Activate Windows Go to Settings to activate Windows" and the date/time "11/28/2019 6:39 PM".

- Anjing.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 Hp-One
 */
public class Anjing extends Pet {
    public String perilaku () {
        return "Menyukai Daging Dan tulang";
    }
    public String suara(){
        return "Guk...Guk..Guk";
    }
}

```

- Kucing.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 Hp-One
 */
public class Kucing extends Pet {
    public String perilaku(){
        return "Menyukai Ikan";
    }
    public String suara(){
        return "Meooww...Meoowww";
    }
}

```

- DemoPet.java

DemoPet.java

```

7  /**
8  *
9  * @author Hp-One
10 */
11
12 public class DemoPet {
13     public static void main(String[] args) {
14         Kucing C = new Kucing();
15         C.beriNama("TOM");
16         System.out.println(C.panggilNama());
17         System.out.println(C.perilaku());
18         System.out.println(C.suara() + "\n");
19
20         Anjing D = new Anjing();
21         D.beriNama("Bull");
22         System.out.println(D.panggilNama());
23         System.out.println(D.perilaku());
24         System.out.println(D.suara() + "\n");
25     }
26 }

```

Output - Polymorphism (run)

```

run:
TOM
Menyukai Ikan
Meoooo...Meoooooww

Bull
Menyukai Daging Dan tulang
Guk...Guk..Guk

BUILD SUCCESSFUL (total time: 3 seconds)

```

Activate Windows
Go to Settings to activate Windows.

- Hewan.java

Hewan.java

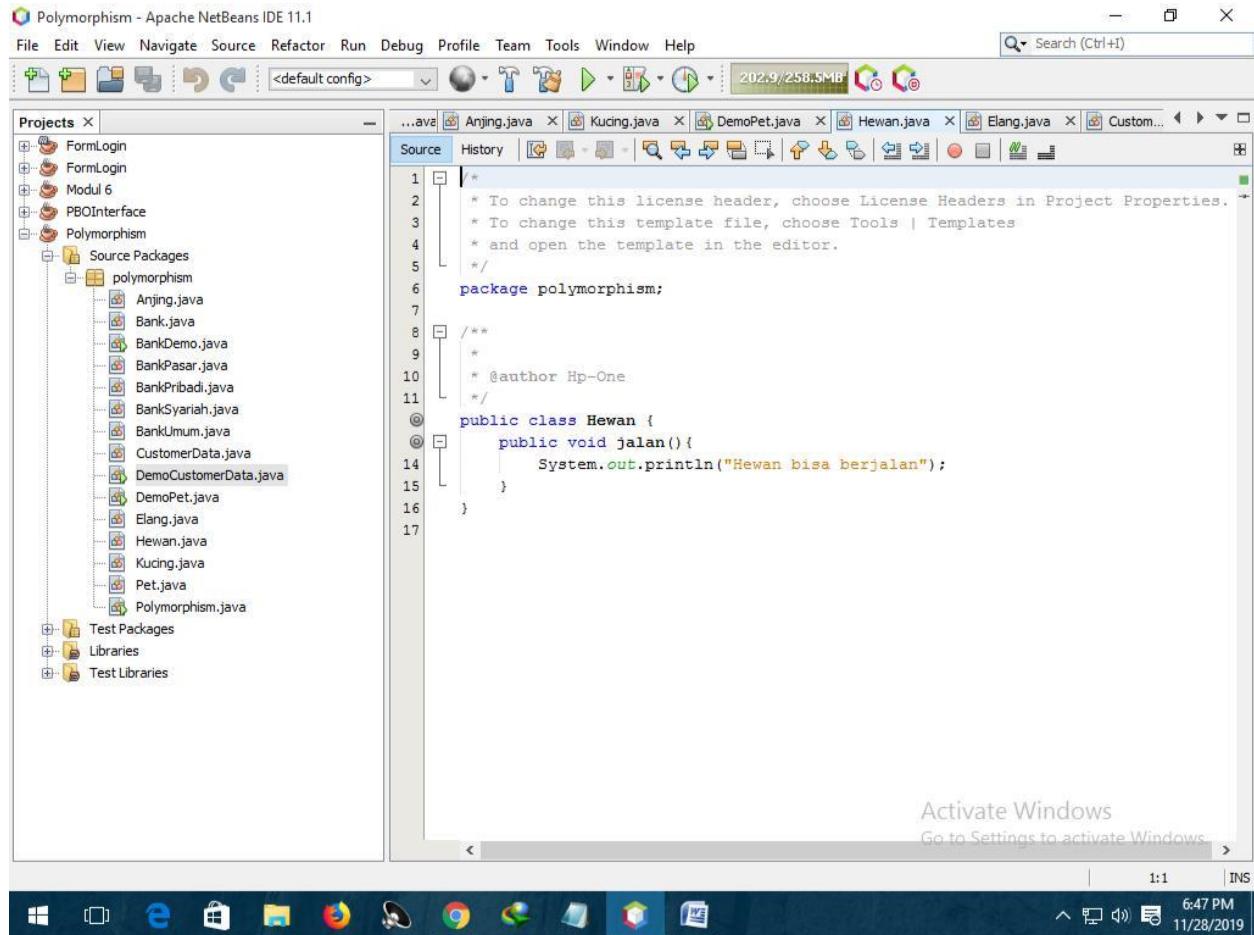
```

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 polymorphism;
7
8 /**
9  *
10 * @author Hp-One
11 */
12
13 public class Hewan {
14     public void jalan(){
15         System.out.println("Hewan bisa berjalan");
16     }
17 }

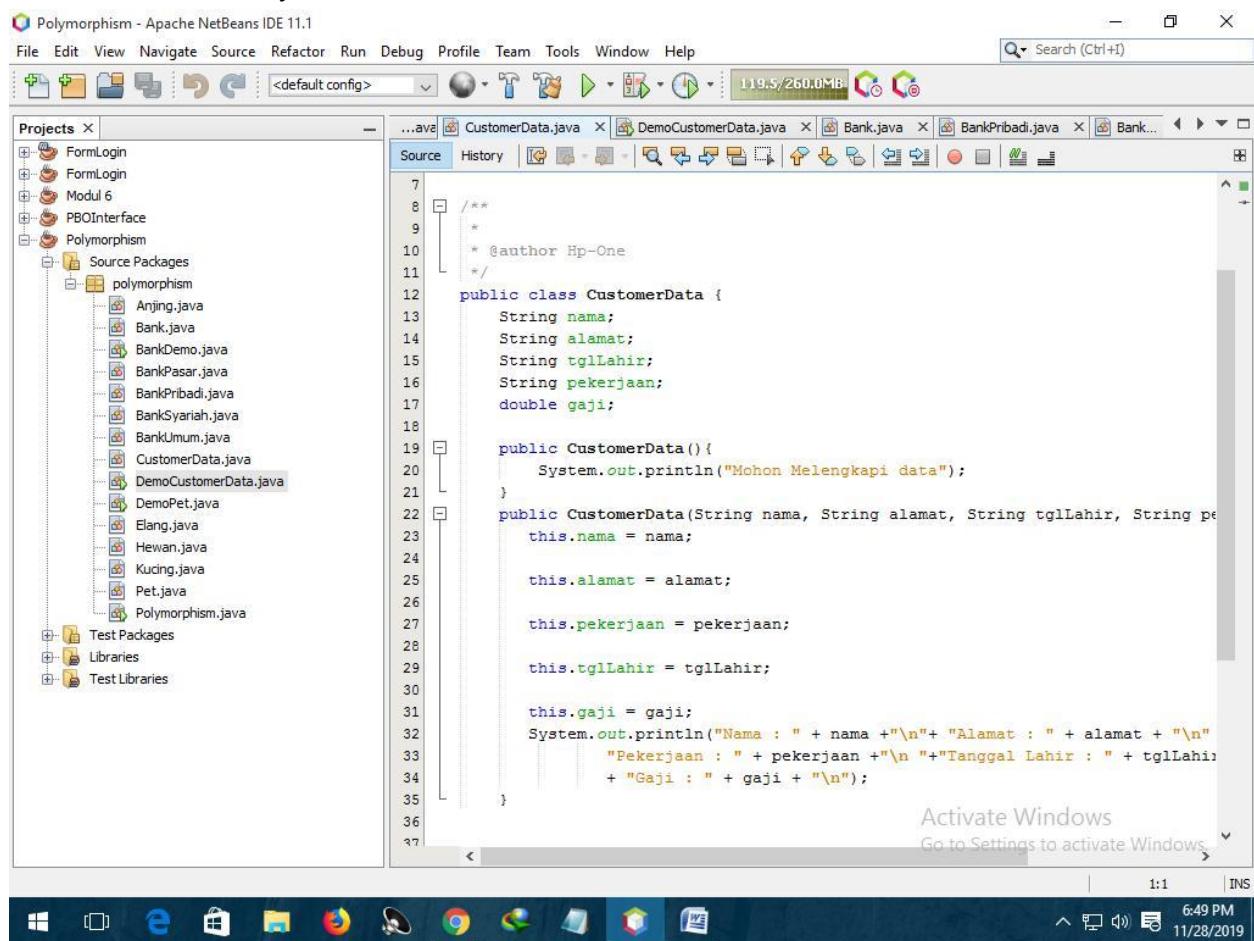
```

Activate Windows
Go to Settings to activate Windows.

- Elang.java



- CustomerData.java



- DemoCustomerData.java

```

7 /**
8 *
9 * @author Hp-One
10 */
11
12 public class DemoCustomerData {
13     public static void main(String[] args){
14         CustomerData C1 = new CustomerData("Andi", "Papahan", "5 Agustus 2000", "Buruh", 10000 );
15
16         CustomerData C2 = new CustomerData("Budi", "Karanganyar", "4 Agustus 2002", "Masinis", 200000 );
17         CustomerData C3 = new CustomerData("Ari", "Tasikmadu", "6 Agustus 2003", "Pilot", 3000000 );
18         CustomerData C4 = new CustomerData("Sindi", "Sragen", "7 Agustus 2004", "Mekanik", 4000000 );
19         CustomerData C5 = new CustomerData("Edward", "Boyolali", "8 Agustus 2005", "Guru", 50000000 );
20         CustomerData C6 = new CustomerData("Alphonse", "Selo", "9 Agustus 1999", "Swasta", 60000000 );
21         CustomerData C7 = new CustomerData("Deku", "Suruh", "10 Agustus 1997", "Pegawai", 70000 );
22         CustomerData C8 = new CustomerData("Todoroki", "Kranggan", "1 Agustus 1998", "Petani", 80000 );
23         CustomerData C9 = new CustomerData("Shu", "Surakarta", "2 Agustus 2000", "Dosen", 90000 );
24         CustomerData C10 = new CustomerData("Lewis", "Semarang", "3 Agustus 2000", "PNS", 100000 );
25     }
26 }

```

Output - Polymorphism (run)

```

run:
Nama : Andi
Alamat : Papahan
Pekerjaan : Buruh
Tanggal Lahir : 5 Agustus 2000
Gaji : 10000.0

Nama : Budi
Alamat : Karanganyar
Pekerjaan : Masinis
Tanggal Lahir : 4 Agustus 2002

```

Activate Windows
Go to Settings to activate Windows.

- Bank.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 polymorphism;
7
8 /**
9  *
10 * @author Hp-One
11 */
12 @public class Bank {
13     int rasio;
14
15     protected int rasioBunga(){
16         return rasio;
17     }
18 }

```

Activate Windows
Go to Settings to activate Windows.

- BankPribadi.java

The screenshot shows the Apache NetBeans IDE 11.1 interface. The title bar reads "Polymorphism - Apache NetBeans IDE 11.1". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, and Help. The toolbar has various icons for file operations like Open, Save, and Build. The Projects tab is selected, showing a single project node. The Source tab is active, displaying the following Java code:

```
/*
 * 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 Hp-One
 */
public class BankPribadi extends Bank{

    protected int rasioBunga(){
        return 7;
    }
}
```

In the status bar at the bottom right, it says "Activate Windows Go to Settings to activate Windows." and shows the date and time as 11/28/2019 6:50 PM.

- BankUmum.java

The screenshot shows the Apache NetBeans IDE 11.1 interface. The title bar reads "Polymorphism - Apache NetBeans IDE 11.1". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, and Help. The toolbar has various icons for file operations like Open, Save, and Build. The Projects tab is selected, showing a single project node. The Source tab is active, displaying the following Java code:

```
/*
 * 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 Hp-One
 */
public class BankUmum extends Bank {

    protected int rasioBunga(){
        return 6;
    }
}
```

In the status bar at the bottom right, it says "Activate Windows Go to Settings to activate Windows." and shows the date and time as 11/28/2019 6:50 PM.

- BankPasar.java

The screenshot shows the Apache NetBeans IDE 11.1 interface. The title bar reads "Polymorphism - Apache NetBeans IDE 11.1". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has various icons for file operations like Open, Save, Find, and Run. The Projects panel shows a single project with a source folder containing the BankPasar.java file. The Source editor displays 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 Hp-One
11 */
12 public class BankPasar extends BankUmum{
13     protected int rasioBunga(){
14         return 4;
15     }
16 }
17
```

The status bar at the bottom right shows "Activate Windows Go to Settings to activate Windows.", the window size as 1:1, and the date/time as 6:50 PM 11/28/2019.

- BankSyariah.java

The screenshot shows the Apache NetBeans IDE 11.1 interface. The title bar reads "Polymorphism - Apache NetBeans IDE 11.1". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has various icons for file operations like Open, Save, Find, and Run. The Projects panel shows a single project with a source folder containing the BankSyariah.java file. The Source editor displays 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 Hp-One
11 */
12 public class BankSyariah extends BankUmum {
13     protected int rasioBunga(){
14         return 5;
15     }
16 }
17
```

The status bar at the bottom right shows "Activate Windows Go to Settings to activate Windows.", the window size as 1:1, and the date/time as 6:51 PM 11/28/2019.

- BankDemo.java

The screenshot shows the Apache NetBeans IDE 11.1 interface. The main window displays the code for `BankDemo.java` in the Source tab of the Projects panel. The code creates four bank objects and prints their rasioBunga values. The output window shows the results of the run:

```
run:
Bank Pribadi : 7
Bank Umum : 6

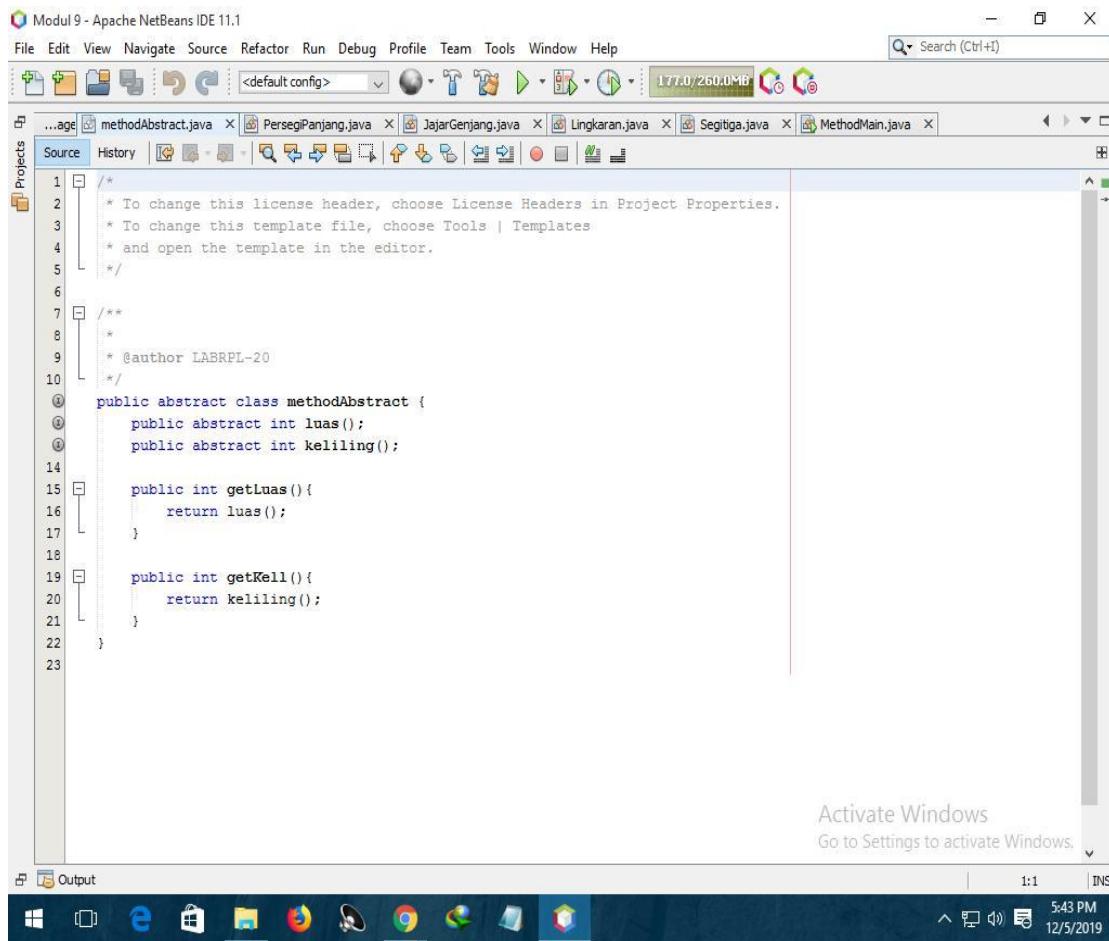
Bank Pasar : 4
Bank Syariah : 5
BUILD SUCCESSFUL (total time: 2 seconds)
```

The status bar at the bottom right indicates the date and time as 11/28/2019 and 6:51 PM.

```
11  /*
12   * 
13  public class BankDemo {
14      public static void main(String[] args){
15          Bank B1 = new BankPribadi();
16          Bank B2 = new BankUmum();
17
18          System.out.println(
19              "Bank Pribadi : " + B1.rasioBunga() + "\n" +
20              "Bank Umum : " + B2.rasioBunga() + "\n");
21
22          BankUmum B3 = new BankPasar();
23          BankUmum B4 = new BankSyariah();
24
25          System.out.println(
26              "Bank Pasar : " + B3.rasioBunga() + "\n" +
27              + "Bank Syariah : " + B4.rasioBunga()
28      );
29  }
30 }
```

➤ Modul 9

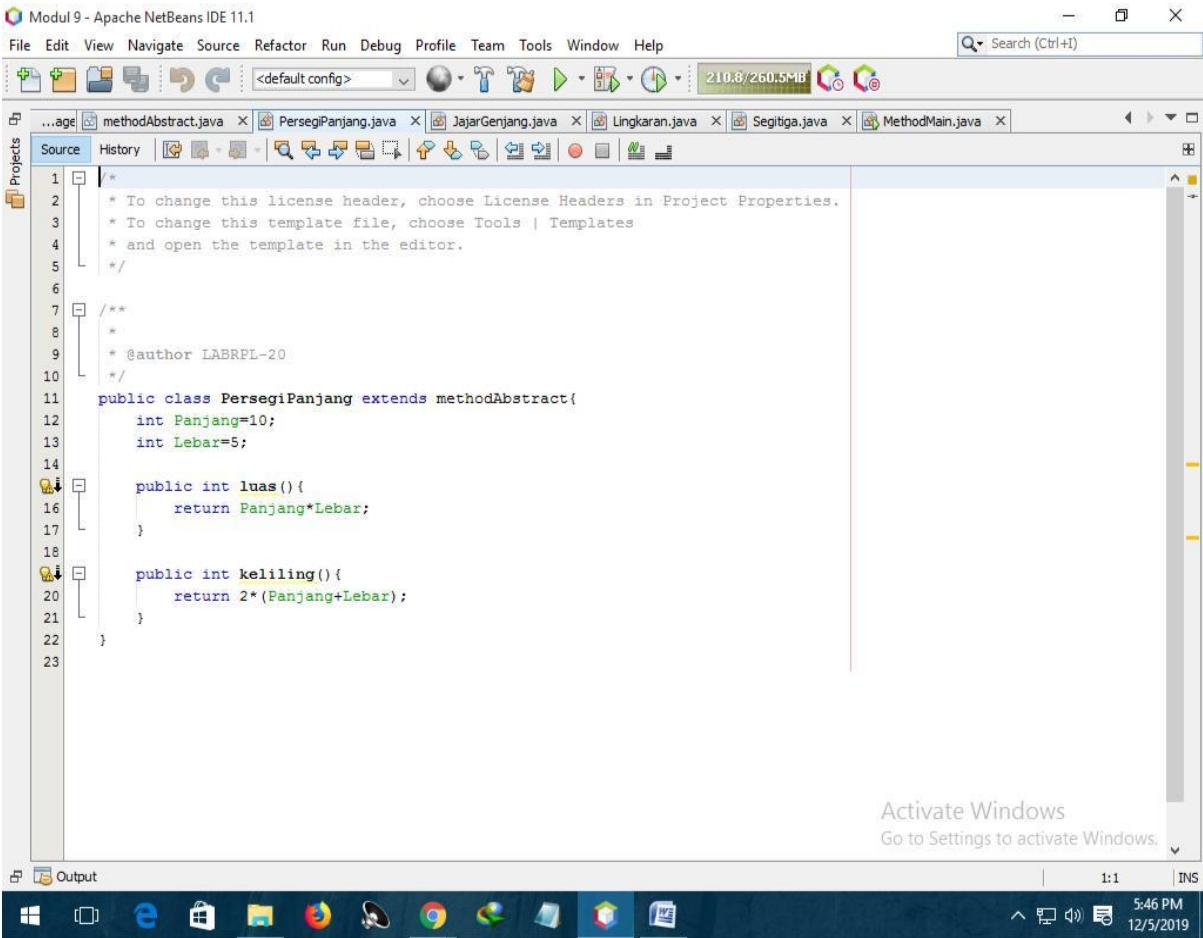
- MethodAbstract.java



The screenshot shows the Apache NetBeans IDE 11.1 interface. The title bar reads "Modul 9 - Apache NetBeans IDE 11.1". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, and Help. The toolbar has various icons for file operations like Open, Save, Cut, Copy, Paste, Find, and Run. The status bar at the bottom right shows "5:43 PM" and "12/5/2019". The code editor displays 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  
7 /**  
8 *  
9 * @author LABRPL-20  
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  
19     public int getKell(){  
20         return keliling();  
21     }  
22 }  
23
```

- PersegiPanjang.java



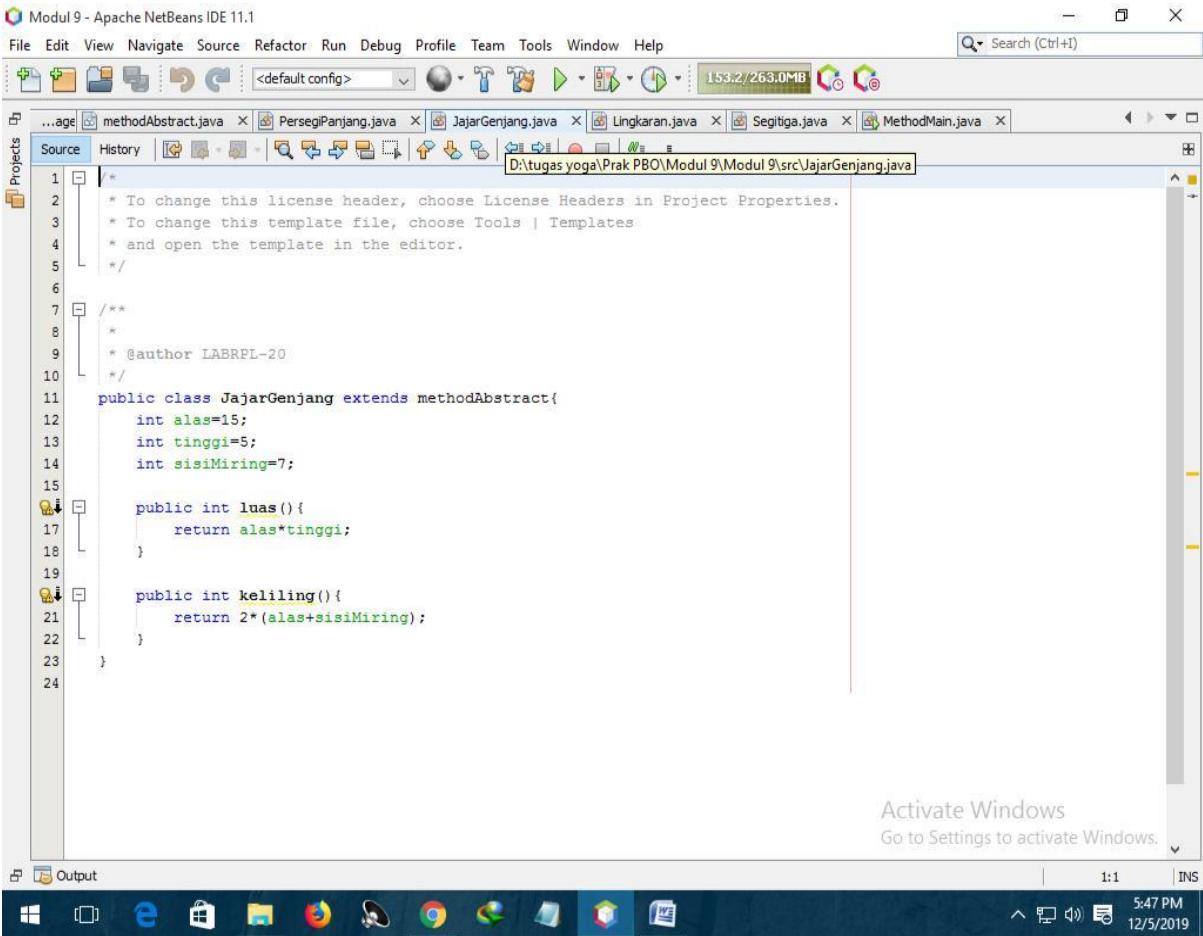
The screenshot shows the Apache NetBeans IDE 11.1 interface. The title bar reads "Modul 9 - Apache NetBeans IDE 11.1". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has various icons for file operations like Open, Save, Find, and Run. The status bar at the bottom right shows "1:1 INS" and the date/time "12/5/2019 5:46 PM".

```

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

```

- JajarGenjang.java



The screenshot shows the Apache NetBeans IDE 11.1 interface. The title bar reads "Modul 9 - Apache NetBeans IDE 11.1". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has various icons for file operations like Open, Save, Find, and Run. The status bar at the bottom right shows "1:1 INS" and the date/time "12/5/2019 5:47 PM".

```

1 /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6
7 /**
8  *
9  * @author LABRPL-20
10 */
11 public class JajarGenjang extends methodAbstract{
12     int alas=15;
13     int tinggi=5;
14     int sisiMiring=7;
15
16     public int luas(){
17         return alas*tinggi;
18     }
19
20     public int keliling(){
21         return 2*(alas+sisiMiring);
22     }
23 }

```

- Lingkaran.java

```

1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6
7 /**
8 *
9 * @author LABRPL-20
10 */
11 public class Lingkaran extends methodAbstract{
12     int Diameter=15;
13     int Pi=22/7;
14
15     public int jariJari(){
16         return Diameter/2;
17     }
18
19     public int luas(){
20         return Pi*(jariJari()*jariJari());
21     }
22
23     public int keliling(){
24         return 2*jariJari();
25     }
26 }
27

```

Activate Windows
Go to Settings to activate Windows.

- Segitiga.java

```

1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6
7 /**
8 *
9 * @author LABRPL-20
10 */
11 public class Segitiga extends methodAbstract{
12     int Alas=15;
13     int Tinggi=5;
14     int sisiMiring=7;
15
16     public int luas(){
17         return (Alas*Tinggi)/2;
18     }
19
20     public int keliling(){
21         return Alas+Tinggi+sisiMiring;
22     }
23 }
24

```

Activate Windows
Go to Settings to activate Windows.

- Demo

Modul 9 - Apache NetBeans IDE 11.1

```

10  /*
11   * To change this license header, choose License Headers in Project Properties.
12   * To change this template file, choose Tools | Templates
13   * and open the template in the editor.
14   */
15   public class MethodMain {
16       public static void main(String[] args) {
17           Persegi psg = new Persegi();
18           PersegiPanjang pj = new PersegiPanjang();
19           JajarGenjang jj = new JajarGenjang();
20           Lingkaran ln = new Lingkaran();
21           Segitiga sg = new Segitiga();
22
23           System.out.println("Persegi");
24           System.out.println("Keliling = "+psg.getKell());
25           System.out.println("Luas = "+psg.getLuas()+"\n");
26
27           System.out.println("Persegi Panjang");
28           System.out.println("Keliling = "+pj.getKell());
29           System.out.println("Luas = "+pj.getLuas()+"\n");
30
31           System.out.println("Jajar Genjang");
32           System.out.println("Keliling = "+jj.getKell());
33           System.out.println("Luas = "+jj.getLuas()+"\n");
34
35           System.out.println("Lingkaran");
36           System.out.println("Keliling = "+ln.getKell());
37           System.out.println("Luas = "+ln.getLuas()+"\n");
38
39           System.out.println("Segitiga");
40           System.out.println("Keliling = "+sg.getKell());
41           System.out.println("Luas = "+sg.getLuas());
42       }
43   }

```

Activate Windows
Go to Settings to activate Windows.

Output

5:48 PM 12/5/2019

Modul 9 - Apache NetBeans IDE 11.1

```

10  /*
11   * To change this license header, choose License Headers in Project Properties.
12   * To change this template file, choose Tools | Templates
13   * and open the template in the editor.
14   */
15   public class MethodMain {
16       public static void main(String[] args) {
17           Persegi psg = new Persegi();
18           PersegiPanjang pj = new PersegiPanjang();
19           JajarGenjang jj = new JajarGenjang();
20           Lingkaran ln = new Lingkaran();
21           Segitiga sg = new Segitiga();
22
23           System.out.println("Persegi");
24           System.out.println("Keliling = "+psg.getKell());
25           System.out.println("Luas = "+psg.getLuas()+"\n");
26
27           System.out.println("Persegi Panjang");
28           System.out.println("Keliling = "+pj.getKell());
29           System.out.println("Luas = "+pj.getLuas()+"\n");
30
31           System.out.println("Jajar Genjang");
32           System.out.println("Keliling = "+jj.getKell());
33           System.out.println("Luas = "+jj.getLuas()+"\n");
34
35           System.out.println("Lingkaran");
36           System.out.println("Keliling = "+ln.getKell());
37           System.out.println("Luas = "+ln.getLuas()+"\n");
38
39           System.out.println("Segitiga");
40           System.out.println("Keliling = "+sg.getKell());
41           System.out.println("Luas = "+sg.getLuas());
42       }
43   }

```

Output - Modul 9 (run)

```

run:
Persegi
Keliling = 20
Luas = 25

Persegi Panjang
Keliling = 30
Luas = 50

Jajar Genjang
Keliling = 44
Luas = 22

```

Activate Windows
Go to Settings to activate Windows.

Output

5:49 PM 12/5/2019

- Tugas

Modul 9 - Apache NetBeans IDE 11.1

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

Search (Ctrl+I)

201.6/241.0MB

Projects Source History <default config> 201.6/241.0MB 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 Tugas;
7
8 /**
9  *
10 * @author LABRPL-20
11 */
12 public abstract class methodAbstract {
13     public abstract float Volume();
14     public abstract float LuasPermukaan();
15
16     public float getVolume(){
17         return Volume();
18     }
19
20     public float getLuasPermukaan(){
21         return LuasPermukaan();
22     }
23 }

```

Activate Windows
Go to Settings to activate Windows.

Output 1:1 5:50 PM 12/5/2019

Modul 9 - Apache NetBeans IDE 11.1

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

Search (Ctrl+I)

222.0/233.0MB

Projects Source History <default config> 222.0/233.0MB Balok.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 LABRPL-20
11 */
12 public class Balok extends methodAbstract{
13     float alas=5f;
14     float lebar=7f;
15     float tinggi=9f;
16
17     public float Volume(){
18         return alas*lebar*tinggi;
19     }
20
21     public float LuasPermukaan(){
22         return (2*(alas*lebar))+(2*(alas*tinggi))+(2*(lebar*tinggi));
23     }
24 }

```

Activate Windows
Go to Settings to activate Windows.

Output 1:1 5:50 PM 12/5/2019

Modul 9 - Apache NetBeans IDE 11.1

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

Search (Ctrl+F)

196.5/237.0MB

Projects 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 LABRPL-20
11 */
12 public class Kubus extends methodAbstract{
13     float sisi=13f;
14
15     public float Volume(){
16         return sisi*sisi*sisi;
17     }
18
19     public float LuasPermukaan(){
20         return 6*(sisi*sisi);
21     }
22 }
23
```

Activate Windows
Go to Settings to activate Windows.

Output

1:1 INS

5:51 PM 12/5/2019

Modul 9 - Apache NetBeans IDE 11.1

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

Search (Ctrl+F)

166.7/262.5MB

Projects 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 LABRPL-20
11 */
12 public class Bola extends methodAbstract{
13     float Diameter=20f;
14     float phi=3.14f;
15
16     public float jariJari(){
17         return Diameter/2;
18     }
19
20     public float Volume(){
21         return (4/3)*(phi*jariJari()*jariJari()*jariJari());
22     }
23
24     public float LuasPermukaan(){
25         return (4*phi*(jariJari()*jariJari()));
26     }
27 }
28
```

Activate Windows
Go to Settings to activate Windows.

Output

1:1 INS

5:51 PM 12/5/2019

Modul 9 - Apache NetBeans IDE 11.1

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

Search (Ctrl+I)

169.0/262.5MB

...java methodAbstract.java X Balok.java X Kubus.java X Bola.java X Kerucut.java X PrismaSegiTiga.java X methodMain.java X

Projects 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 LABRPL-20
11 */
12 public class Kerucut extends methodAbstract{
13     float Diameter=10f;
14     float phi=3.14f;
15     float sisi=23f;
16     float tinggi=20f;
17
18     public float jariJari(){
19         return Diameter/2;
20     }
21
22     public float Volume(){
23         return (1/3)*(phi*(jariJari()*jariJari())*tinggi);
24     }
25
26     public float LuasPermukaan(){
27         return phi*jariJari()*sisi;
28     }
29
30 }
```

Activate Windows
Go to Settings to activate Windows.

Output

1:1 INS

5:52 PM 12/5/2019

Modul 9 - Apache NetBeans IDE 11.1

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

Search (Ctrl+I)

132.5/264.0MB

...java methodAbstract.java X Balok.java X Kubus.java X Bola.java X Kerucut.java X PrismaSegiTiga.java X methodMain.java X

Projects 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 LABRPL-20
11 */
12 public class PrismaSegiTiga extends methodAbstract{
13     float Alas=15f;
14     float Tinggi=5f;
15     float sisiMiring=7f;
16     float tinggiPrisma=30f;
17
18     public float Volume(){
19         return ((Alas*Tinggi)/2)*tinggiPrisma;
20     }
21
22     public float LuasPermukaan(){
23         return ((Alas+Tinggi+sisiMiring)*2)+((tinggiPrisma*2)+(Alas)*2)+((tinggiPrisma*2)+(Tinggi)*2)+((tinggiPrisma*2)+(sisiMiring)*2);
24     }
25
26 }
```

Activate Windows
Go to Settings to activate Windows.

Output

24:17 INS

5:52 PM 12/5/2019

Modul 9 - Apache NetBeans IDE 11.1

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

Search (Ctrl+I)

201.5/265.0MB

...java methodAbstract.java Balok.java Kubus.java Bola.java Kerucut.java PrismaSegiTiga.java methodMain.java

Projects Source History

```
10  * @author LABRPL-20
11  */
12  public class methodMain {
13      public static void main(String[] args){
14          Kubus kbs = new Kubus();
15          Balok blk = new Balok();
16          Bola bol = new Bola();
17          Kerucut krc = new Kerucut();
18          PrismaSegiTiga prs = new PrismaSegiTiga();
19
20          System.out.println("Kubus");
21          System.out.println("Volume = "+kbs.getVolume());
22          System.out.println("Luas Permukaan = "+kbs.getLuasPermukaan()+"\n");
23
24          System.out.println("Balok");
25          System.out.println("Volume = "+blk.getVolume());
26          System.out.println("Luas Permukaan = "+blk.getLuasPermukaan()+"\n");
27
28          System.out.println("Bola");
29          System.out.println("Volume = "+bol.getVolume());
30          System.out.println("Luas Permukaan = "+bol.getLuasPermukaan()+"\n");
31
32          System.out.println("Kerucut");
33          System.out.println("Volume = "+krc.getVolume());
34          System.out.println("Luas Permukaan = "+krc.getLuasPermukaan()+"\n");
35
36          System.out.println("Prisma Segi Tiga");
37          System.out.println("Volume = "+prs.getVolume());
38          System.out.println("Luas Permukaan = "+prs.getLuasPermukaan()+"\n");
39      }
40  }
```

Activate Windows
Go to Settings to activate Windows.

Output

1:1 INS

5:53 PM 12/5/2019

Modul 9 - Apache NetBeans IDE 11.1

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

Search (Ctrl+I)

123.0/266.5MB

...java methodAbstract.java Balok.java Kubus.java Bola.java Kerucut.java PrismaSegiTiga.java methodMain.java

Projects Source History

```
10  * @author LABRPL-20
11  */
12  public class methodMain {
13      public static void main(String[] args){
14          Kubus kbs = new Kubus();
15          Balok blk = new Balok();
16          Bola bol = new Bola();
17          Kerucut krc = new Kerucut();
18          PrismaSegiTiga prs = new PrismaSegiTiga();
19
20          System.out.println("Kubus");
21          System.out.println("Volume = "+kbs.getVolume());
22          System.out.println("Luas Permukaan = "+kbs.getLuasPermukaan()+"\n");
23
24          System.out.println("Balok");
25          System.out.println("Volume = "+blk.getVolume());
26          System.out.println("Luas Permukaan = "+blk.getLuasPermukaan()+"\n");
27
28          System.out.println("Bola");
29          System.out.println("Volume = "+bol.getVolume());
```

: Output - Modul 9 (run)

Shape	Name	Volume	Luas Permukaan
Kubus		2197.0	1014.0
Balok		315.0	286.0
Bola		3140.0	1256.0

Activate Windows
Go to Settings to activate Windows.

Output

1:1 INS

5:53 PM 12/5/2019

➤ Modul 10

The screenshot shows the NetBeans IDE 8.2 interface. The left pane displays the project structure for 'Modul 10'. The right pane shows the code editor with the 'ActivityLampu.java' file open. The code defines an interface named 'ActivityLampu' with three abstract methods: 'matikanLampu()', 'hidupkanLampu()', and 'meredupkanLampu()'. The code editor includes syntax highlighting and a status bar at the bottom indicating the run status.

```
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 modul.pkg10;
7
8 /**
9 *
10 * @author LABRPL-36
11 */
12 public interface ActivityLampu {
13     public static final int Lampu_Hidup = 2;
14     public static final int Lampu_Mati = 0;
15     public static final int Lampu_redu = 1;
16     public abstract void matikanLampu();
17     public abstract void hidupkanLampu();
18     public abstract void meredupkanLampu();
19 }
```

The screenshot shows the NetBeans IDE 8.2 interface. The left pane displays the project structure for 'Modul 10'. The right pane shows the code editor with the 'Lampa.java' file open. The code implements the 'ActivityLampu' interface with a private variable 'statusLampu' and three methods: 'matikanLampu()', 'hidupkanLampu()', and 'meredupkanLampu()'. The 'matikanLampu()' method prints 'Lampu sudah dalam kondisi mati' if the status is 0, or 'Lampu sudah dimatikan' if it's 2. The 'hidupkanLampu()' method prints 'Lampu sudah dinyalakan\n***' if the status is 0, or 'Lampu sudah dalam keadaan menyala' if it's 2. The 'meredupkanLampu()' method prints 'Lampu sudah diredupkan' if the status is 1. The code editor includes syntax highlighting and a status bar at the bottom indicating the run status.

```
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 modul.pkg10;
7
8 /**
9 *
10 * @author LABRPL-36
11 */
12 public class Lampa implements ActivityLampu {
13     public int statusLampu;
14
15     public void matikanLampu(){
16         if(statusLampu == 0){
17             System.out.println("Lampu sudah dalam kondisi mati");
18         }else if(statusLampu == 2){
19             statusLampu = -2;
20             System.out.println("Lampu sudah dimatikan");
21         }
22     }
23
24     public void hidupkanLampu(){
25         if(statusLampu == 0){
26             System.out.println("Lampu sudah dinyalakan\n***");
27         }
28         else {
29             statusLampu = +2;
30             System.out.println("Lampu sudah dalam keadaan menyala");
31         }
32     }
33
34     public void meredupkanLampu(){
35         if(statusLampu == 1){
36             System.out.println("Lampu sudah diredupkan");
37         }
38     }
39 }
```

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

- Title Bar:** Modul 10 - NetBeans IDE 8.2
- Menu Bar:** File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help
- Toolbar:** Standard NetBeans toolbar with icons for file operations.
- Project Explorer:** Shows the project structure under "Modul 10".
 - Source Packages: modul.pkg10 (ActivityLampu.java, ApikasiLampu.java, Lampu.java, Modul10.java)
 - Test Packages
 - Libraries
 - Test Libraries
- Code Editor:** Displays the Java code for "Lampu.java". The code handles the status of a lamp (statusLampu) which can be 0 (off), 1 (on), or 2 (dimmed). It includes methods to turn it on/off/dim, set the switch state, and get the current status.

```
if(statusLampu == 2){
    System.out.println("Lampu sudah dinyalakan\n***");
}

else {
    statusLampu = +2;
    System.out.println("Lampu sudah dalam keadaan menyala");
}

public void meredukanLampu(){
    if(statusLampu == 1){
        System.out.println("Lampu sudah diredukan");
    }
    else{
        statusLampu = +1;
        System.out.println("Lampu sudah dalam keadaan redup");
    }
}

public int setSaklar(int saklar){
    return statusLampu = saklar;
}
```
- Navigator:** Shows the members of the "Lampu" class:
 - hidukanLampu()
 - matiskanLampu()
 - meredukanLampu()
 - setSaklar(int saklar): int
 - statusLampu : int
- Bottom Status Bar:** modul.pkg10.Lampu > setSaklar > Modul 10 (run) #3 | running... | 47:6 | IN | 15:36 | 06/12/2019
- System Tray:** Shows icons for the operating system and browser.

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

- Menu Bar:** File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help.
- Toolbar:** Standard NetBeans toolbar with icons for file operations.
- Project Explorer:** Shows a project named "Modul 10" containing a package "modul.pkg10" with classes "AplikasiLampu.java", "ActivityLampu.java", "Lampu.java", and "Modul10.java". It also lists "Source Packages", "Text Packages", "Libraries", and "Text Libraries".
- Code Editor:** Displays the "AplikasiLampu.java" source code. The code implements a Scanner to read user input and a Lampu class to control a lamp's state (statusLampa). The main method handles turning the lamp on or off based on the input value.

```
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 modul.pkg10;
7
8  /**
9   * @author LABRPL-36
10  */
11
12 import java.util.Scanner;
13 public class AplikasiLampu {
14     public static void main(String[] args) {
15         Lampu lampu = new Lampu();
16         Scanner sc = new Scanner(System.in);
17         lampu.statusLampa = lampu.setSaklar(0);
18         System.out.println("Status Lampu = " + lampu.statusLampa + "\nKetikkan");
19         System.out.println("2 untuk menyalaikan lampu\n1 untuk memadamkan lampu");
20
21         int input = sc.nextInt();
22
23         if(lampu.setSaklar(input)==0){
24             lampu.matiakanLampu();
25         }
26         else_if(lampu.setSaklar(input)==1){
27             lampu.meredupkanLampu();
28         }
29         else{
30             lampu.hidupkanLampu();
31         }
32     }
33 }
34
```

- Navigator:** Shows the members of the "AplikasiLampu" class, specifically the "main(String[] args)" method.
- Bottom Status Bar:** Shows the current file ("modul.pkg10.AplikasiLampu"), the run configuration ("Modul 10 (run) #3"), and the date/time ("26/3/2019").

Modul 10 - NetBeans IDE 8.2

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

Projects Files Services Start Page Modul10.java ActivityLampu.java Lampu.java ApikasLampu.java

Source History <default config> T T D E S

Module 10

Source Packages modul.pkg10

ActivityLampu.java ApikasLampu.java Lampu.java Modul10.java

Test Packages Libraries Test Libraries

ApikasLampu

Members 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 modul.pkg10;
7
8 /**
9 *
10 * @author LABRPL-36
11 */
12 import java.util.Scanner;
13 public class ApikasLampu {
14     public static void main(String[] args) {
15         Lampu lampu = new Lampu();
16         Scanner sc = new Scanner(System.in);
17         lampu.setStatusLampu = lampu.setSaklar(0);
18         System.out.println("Status Lampu = " + lampu.getStatusLampu + "\nKetikkan");
19         System.out.println("2 untuk menyalaikan lampu");
20         System.out.println("1 untuk memadamkan lampu");
21         System.out.println("0 untuk mematikan lampu");
22         System.out.println("Untuk keluar");
23         System.out.println("Lampu sudah dinyalakan");
24         System.out.println("BUILD SUCCESSFUL (total time: 5 seconds)");
25     }
26 }
27
28
29 }
```

Output

Modul 10 (run) #1 Modul 10 (run) #2 Modul 10 (run) #3 Modul 10 (run) #4

Status Lampu = 0
Ketikkan
2 untuk menyalaikan lampu
1 untuk memadamkan lampu
0 untuk mematikan lampu
Untuk keluar
Lampu sudah dinyalakan
BUILD SUCCESSFUL (total time: 5 seconds)

Modul 10 (run) #3 running... (2 more...) 26:39 15:37 06/12/2019

Modul 10 - NetBeans IDE 8.2

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

Projects Files Services Start Page Modul10.java ActivityLampu.java Lampu.java ApikasLampu.java

Source History <default config> T T D E S

Module 10

Source Packages modul.pkg10

ActivityLampu.java ApikasLampu.java Lampu.java Modul10.java

Test Packages Libraries Test Libraries

ApikasLampu

Members main(String[] args)

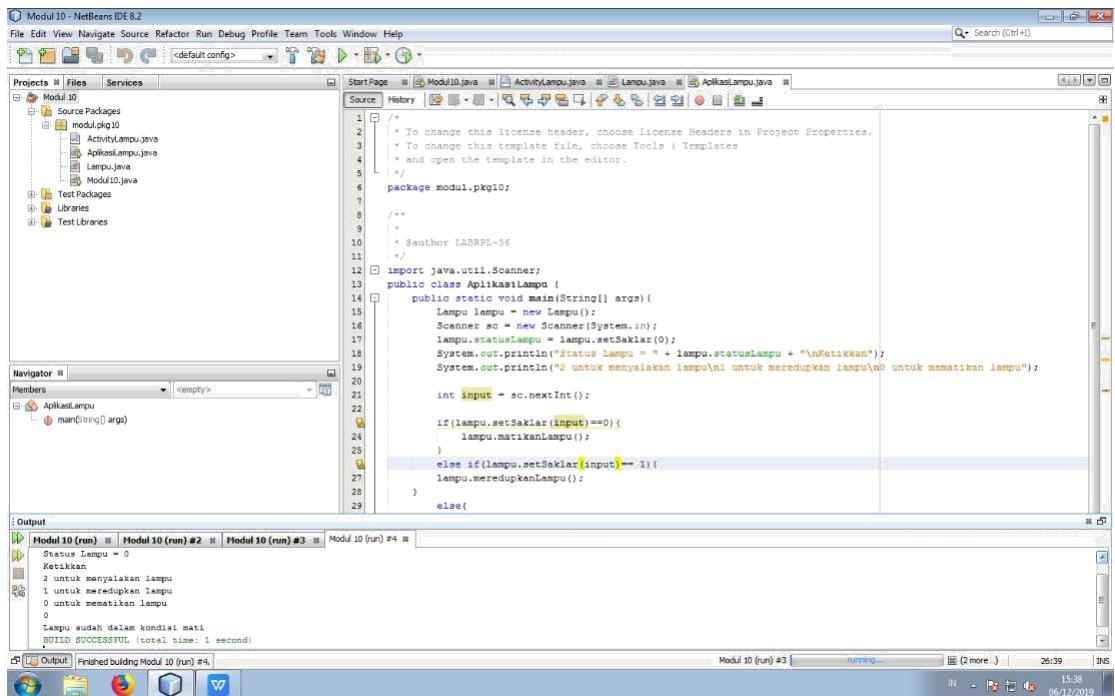
```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6 package modul.pkg10;
7
8 /**
9 *
10 * @author LABRPL-36
11 */
12 import java.util.Scanner;
13 public class ApikasLampu {
14     public static void main(String[] args) {
15         Lampu lampu = new Lampu();
16         Scanner sc = new Scanner(System.in);
17         lampu.setStatusLampu = lampu.setSaklar(0);
18         System.out.println("Status Lampu = " + lampu.getStatusLampu + "\nKetikkan");
19         System.out.println("2 untuk menyalaikan lampu");
20         System.out.println("1 untuk memadamkan lampu");
21         System.out.println("0 untuk mematikan lampu");
22         System.out.println("Untuk keluar");
23         System.out.println("Lampu sudah dinyalakan");
24         System.out.println("BUILD SUCCESSFUL (total time: 3 seconds)");
25     }
26 }
27
28
29 }
```

Output

Modul 10 (run) #1 Modul 10 (run) #2 Modul 10 (run) #3 Modul 10 (run) #4

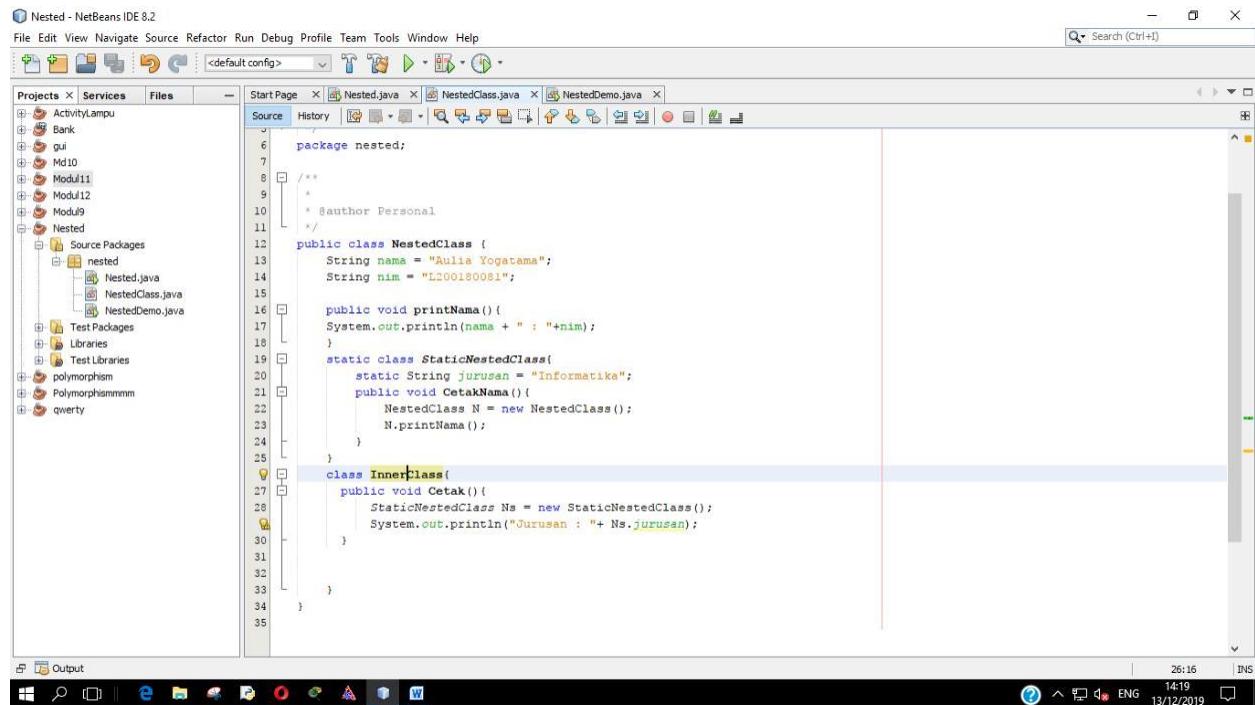
2 untuk menyalaikan lampu
1 untuk memadamkan lampu
0 untuk mematikan lampu
Untuk keluar
Lampu sudah dinyalakan
BUILD SUCCESSFUL (total time: 3 seconds)

Modul 10 (run) #3 running... (2 more...) 26:39 15:37 06/12/2019



➤ Modul Ke-11

● NestedClass.java



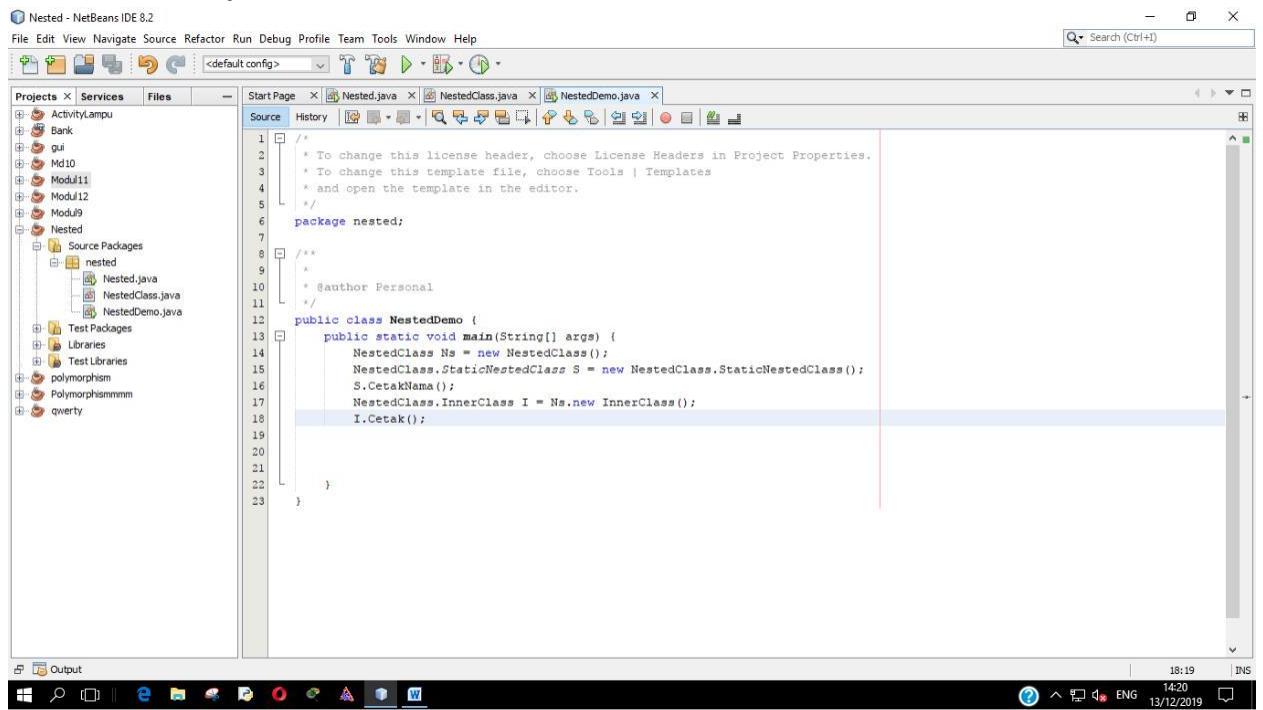
The screenshot shows the NetBeans IDE 8.2 interface with the following details:

- Title Bar:** Nested - NetBeans IDE 8.2
- Menu Bar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Search Bar:** Search (Ctrl+I)
- Projects Tab:** Shows various Java projects like ActivityLampu, Bank, Md10, Modul11, Modul12, Modul9, and Nested.
- Files Tab:** Shows the current file is NestedClass.java.
- Code Editor:** Displays the Java code for NestedClass.java. The code includes a package declaration, class definitions (NestedClass, StaticNestedClass, InnerClass), and static methods (printNama, Cetak).

```
6 package nested;
7
8 /**
9 * @author Personal
10 */
11
12 public class NestedClass {
13     String nama = "Aulia Yogatama";
14     String nim = "LC200180081";
15
16     public void printNama(){
17         System.out.println(nama + " : "+nim);
18     }
19     static class StaticNestedClass{
20         static String jurusan = "Informatika";
21         public void CetakNama(){
22             NestedClass N = new NestedClass();
23             N.printNama();
24         }
25     }
26     class InnerClass{
27         public void Cetak(){
28             StaticNestedClass Ns = new StaticNestedClass();
29             System.out.println("Jurusan : "+ Ns.jurusan);
30         }
31     }
32 }
33
34 }
```

- Output Tab:** Shows standard output from the build process.
- System Tray:** Displays system icons and status information (26:16, 14:19, ENG, 13/12/2019).

- NestedDemo.java

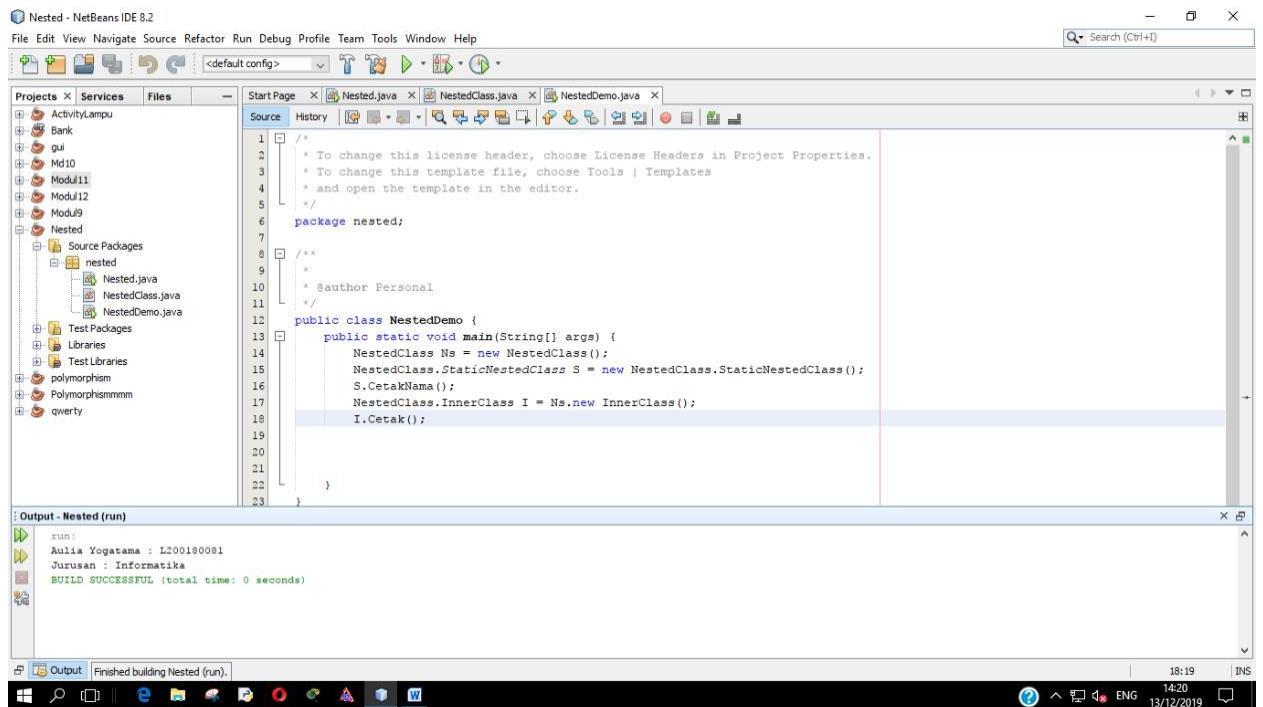


```

Nested - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Source History <default config> Start Page Nested.java NestedClass.java NestedDemo.java
Projects Services Files
ActivityLampu Bank
gui Md10 Modul11 Modul12 Modul9 Nested
Source Packages nested
Nested.java NestedClass.java NestedDemo.java
Test Packages Libraries Test Libraries
polymorphism Polymorphismmm qwerty
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 nested;
7
8 /*
9 *
10 * @author Personal
11 */
12 public class NestedDemo {
13     public static void main(String[] args) {
14         NestedClass Ns = new NestedClass();
15         NestedClass.StaticNestedClass S = new NestedClass.StaticNestedClass();
16         S.CetakNama();
17         NestedClass.InnerClass I = Ns.new InnerClass();
18         I.Cetak();
19     }
20 }
21
22 }
23

```

- Demo



The screenshot shows the NetBeans IDE interface with the NestedDemo.java file open in the editor. Below the editor, the Output window displays the results of a run:

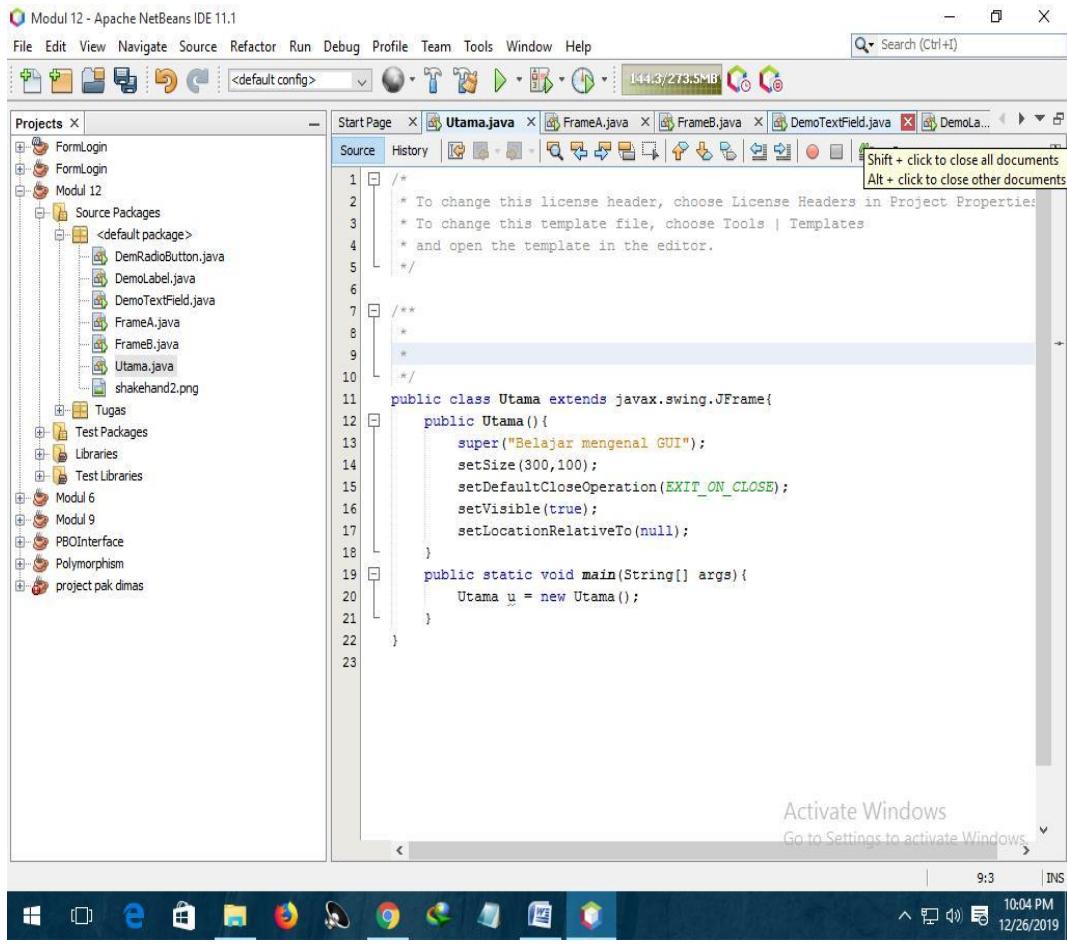
```

Output - Nested (run)
run:
Aulia Yogatama : L200180081
Jurusan : Informatika
BUILD SUCCESSFUL (total time: 0 seconds)

```

➤ MODUL 12

➤ Frame

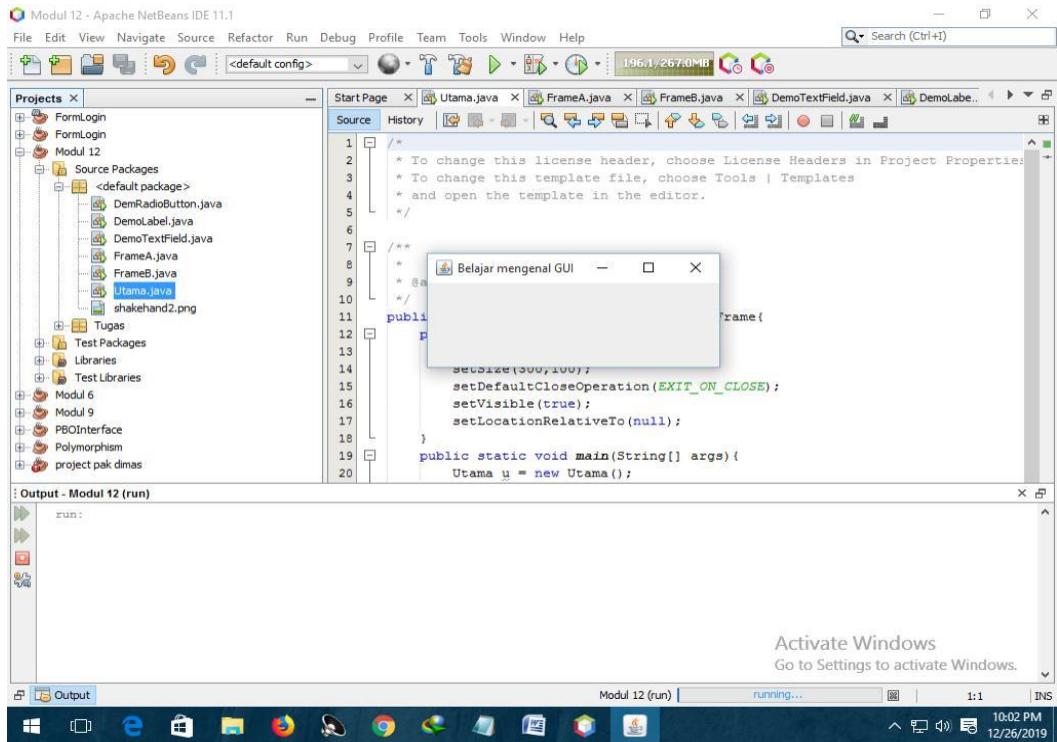


The screenshot shows the Apache NetBeans IDE interface. The title bar reads "Modul 12 - Apache NetBeans IDE 11.1". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has various icons for file operations. The Projects tab shows a hierarchy of projects and source packages. The Source tab displays the code for Utama.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.
 */
/*
 *
 */
public class Utama extends javax.swing.JFrame{
    public Utama(){
        super("Belajar mengenal GUI");
        setSize(300,100);
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setVisible(true);
        setLocationRelativeTo(null);
    }
    public static void main(String[] args){
        Utama u = new Utama();
    }
}
```

The status bar at the bottom shows "Activate Windows Go to Settings to activate Windows.", the system tray, and the date/time "12/26/2019 10:04 PM".

• Output



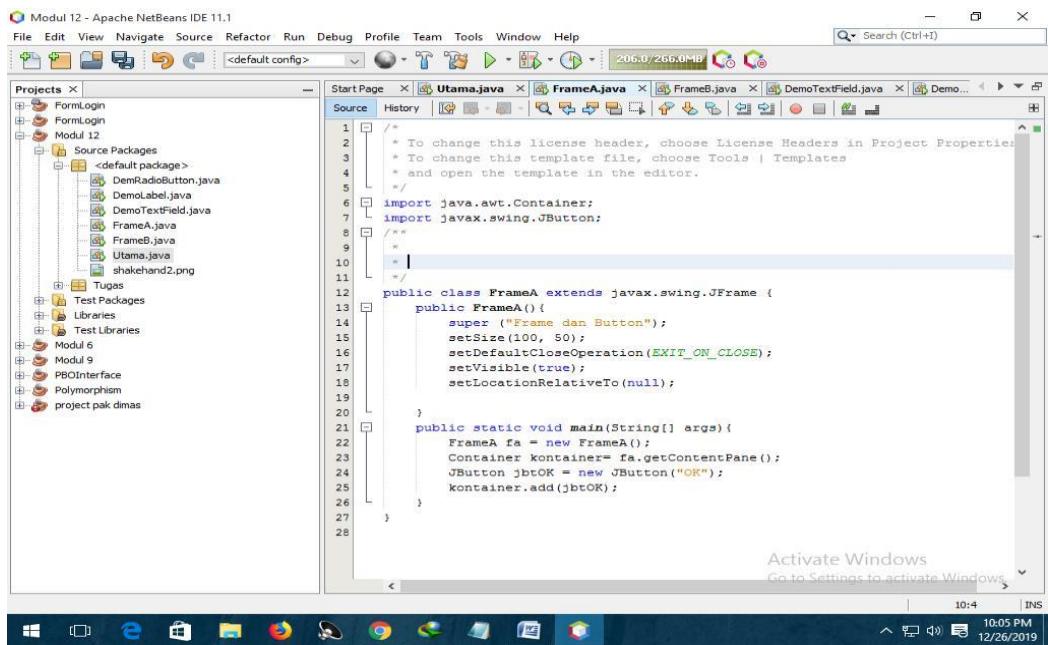
The screenshot shows the Apache NetBeans IDE interface with the same setup as the previous screenshot. The Source tab now shows the code with a callout box highlighting the window title "Belajar mengenal GUI". The Output tab at the bottom shows the command "run:" followed by a green play button icon.

Konstruktor	Keterangan
JFrame()	<ul style="list-style-type: none"> • Jendelautamayang digunakanuntukmenampilkankomponen yang kitainginkan. • MembuatJFrametanpajudul.
JFrame(String Judul)	<ul style="list-style-type: none"> • Pemberiannama padajendelautama yang ditampilkan. • MembuatJFramedenganjudul.

Metode	Keterangan
void setSize(int lebar, int tinggi)	Mengaturukuran frame.
void setLocation(int x, int y)	Mengaturlokasi framedihitungdarikiriatas.
void setVisible(boolean)	MenentukanJFrameditampilkannatautidak.
void setLocationRelativeTo(Component)	MenentukanletakJFrame relative dengankomponenlainnya. Jikadiset null, makaJFrameakan ditampilkan di tengah.



Button



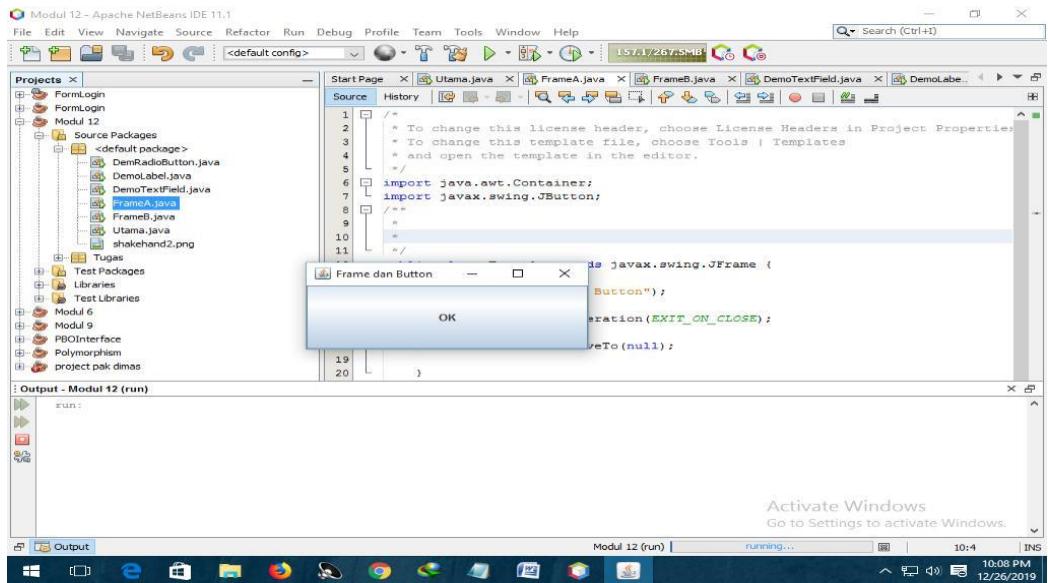
The screenshot shows the Apache NetBeans IDE interface. The top menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, and Help. The title bar says "Modul 12 - Apache NetBeans IDE 11.1". The left sidebar displays the project structure under "Modul 12", including packages like "Source Packages" containing files such as DemRadioButton.java, DemoLabel.java, DemoTextField.java, FrameA.java, FrameB.java, Utama.java, and shakehand2.png. The main workspace shows the source code for "FrameA.java". The code creates a frame titled "Frame dan Button" with a size of 100x50 pixels, sets its default close operation to EXIT_ON_CLOSE, and adds a button labeled "OK" to the content pane. The status bar at the bottom right shows the date and time as 12/26/2019 and 10:05 PM.

```

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

```

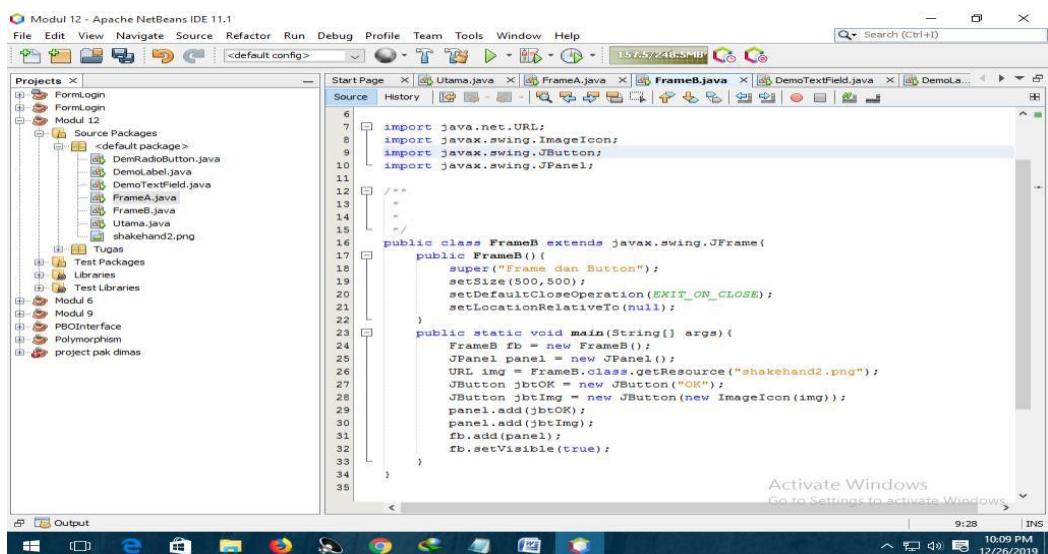
- **Output**



The screenshot shows the Java application running within the NetBeans IDE. The window title is "Frame dan Button". Inside the window, there is a single button labeled "OK". The status bar at the bottom right shows the date and time as 12/26/2019 and 10:08 PM.

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.

➤ Container

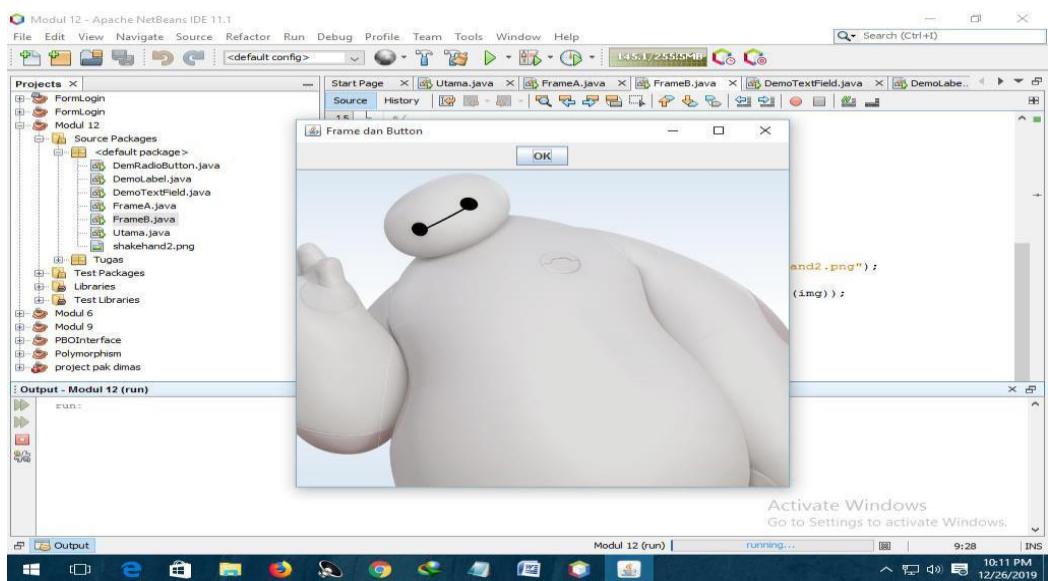


The screenshot shows the Apache NetBeans IDE 11.1 interface. The top menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, and Help. The toolbar has icons for file operations like Open, Save, and Print. The Projects tab shows a project named 'Modul 12' with several Java files: FormLogin, FormLogin, Modul 12, Source Packages, Tugas, Test Packages, Libraries, Test Libraries, Modul 6, Modul 9, PBOInterface, Polymorphism, and project pak dimas. The Source tab displays the code for FrameB.java:

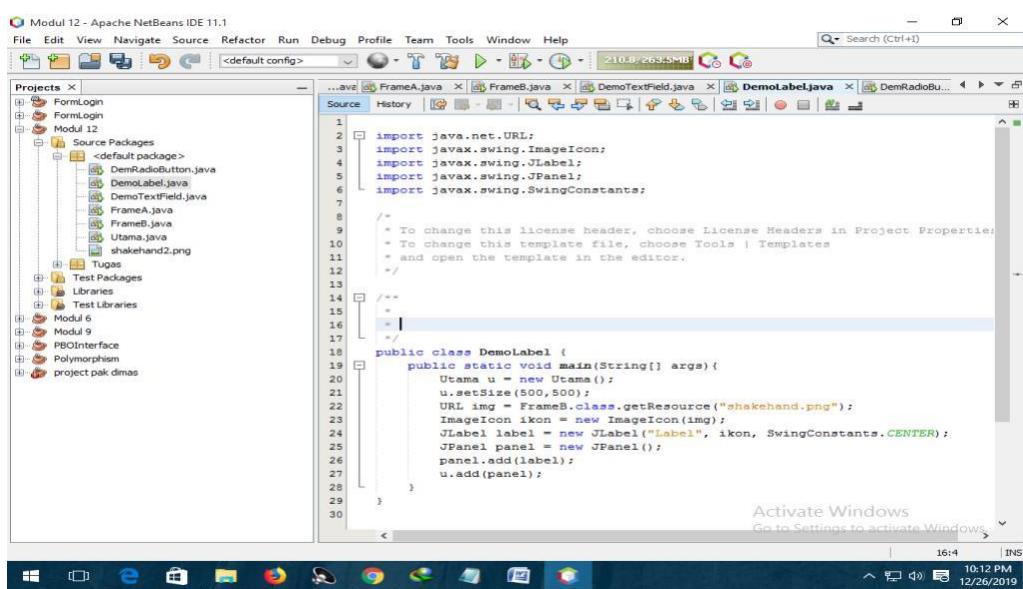
```
6 import java.net.URL;
7 import javax.swing.ImageIcon;
8 import javax.swing.JButton;
9 import javax.swing.JPanel;
10
11 /**
12  * 
13  * 
14  */
15
16 public class FrameB extends javax.swing.JFrame{
17     public FrameB() {
18         super("Frame dan Button");
19         setSize(500,500);
20         setDefaultCloseOperation(EXIT_ON_CLOSE);
21         setLocationRelativeTo(null);
22     }
23
24     public static void main(String[] args){
25         FrameB fb = new FrameB();
26         JPanel panel = new JPanel();
27         URL img = FrameB.class.getResource("shakehand2.png");
28         JButton jbtOK = new JButton("OK");
29         JButton jbtImg = new JButton(new ImageIcon(img));
30         panel.add(jbtOK);
31         panel.add(jbtImg);
32         fb.add(panel);
33         fb.setVisible(true);
34     }
35 }
```

The status bar at the bottom shows "Activate Windows Go to Settings to activate Windows.", the date and time as 12/26/2019 10:09 PM, and the IDE version as 9:28 | INS.

- Output



Label



Modul 12 - Apache NetBeans IDE 11.1

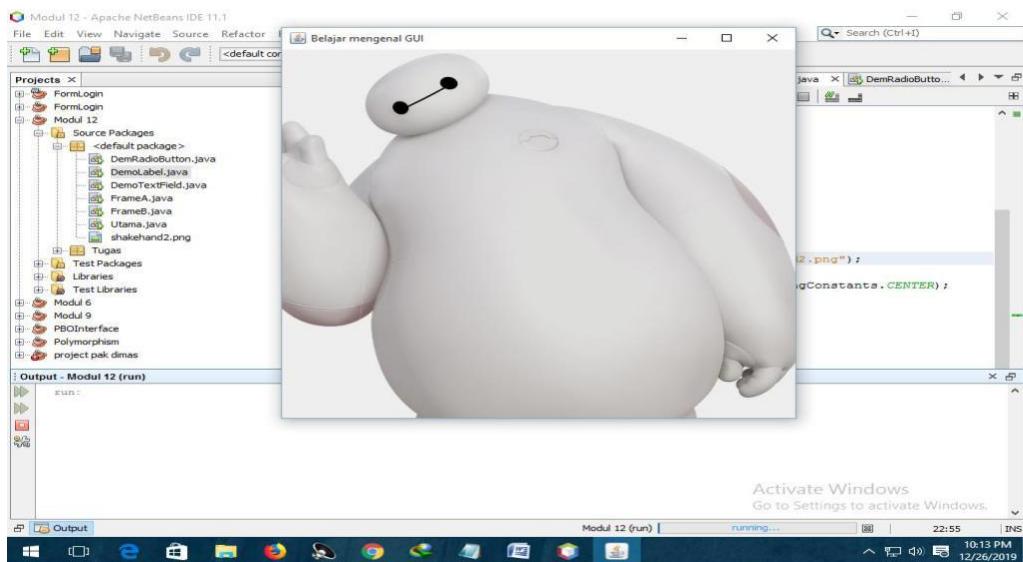
```
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
...ave FrameA.java × FrameB.java × DemoTextField.java × DemoLabel.java × DemRadioBu...
Projects x
Modul 12
  Source Packages
    <default package>
      DemLabel.java
      DemRadioButt...
      DemoTextFiel...
      FrameA.java
      FrameB.java
      Utama.java
      shakehand2.png
  Tugas
  Test Packages
  Libraries
  Test Libraries
Modul 6
Modul 9
PBOInterface
Polymorphism
project pak dimas

Source History ...
Search (Ctrl+F) 210.8 / 263.5MB
1 import java.net.URL;
2 import javax.swing.ImageIcon;
3 import javax.swing.JLabel;
4 import javax.swing.JPanel;
5 import javax.swing.SwingConstants;
6
7 /*
8 * To change this license header, choose License Headers in Project Properties.
9 * To change this template file, choose Tools | Templates.
10 * and open the template in the editor.
11 */
12
13 /**
14 *
15 */
16
17 public class Demolabel {
18     public static void main(String[] args) {
19         Utama u = new Utama();
20         u.setSize(500,500);
21         URL img = FrameB.class.getResource("shakehand2.png");
22         ImageIcon ikon = new ImageIcon(img);
23         JLabel label = new JLabel("Label", ikon, SwingConstants.CENTER);
24         JPanel panel = new JPanel();
25         panel.add(label);
26         u.add(panel);
27     }
28 }
29
30 
```

Activate Windows
Go to Settings to activate Windows.

16:4 INS 10:12 PM 12/26/2019

- Output



Konstruktur	Keterangan
JLabel(String teks)	Label dengan teks.
JLabel(String teks, inti)	Label dengan teks dan alignment (perataan). Terdapat tiga jenis alignment, yaitu LEFT, CENTER, dan RIGHT.
JLabel(String teks, Icon ic, inti)	Label dengan teks, icon, dan alignment.

➤ TextField dan Password Field

```

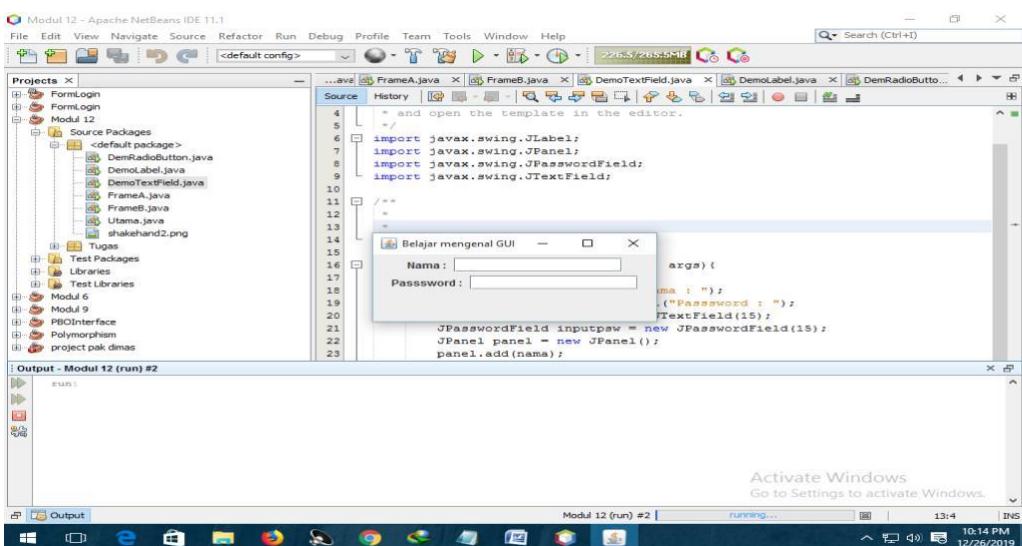
Modul 12 - Apache NetBeans IDE 11.1
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
...java FrameA.java FrameB.java DemoTextField.java DemoLabel.java DemRadioBu...
Projects Modul 12
Source Packages
  <default package>
    DemoButton.java
    DemoLabel.java
    DemoTextField.java
    FrameA.java
    FrameB.java
    Utama.java
    shakehand2.png
  Tugas
  Test Packages
  Libraries
  Test Libraries
Modul 6
Modul 9
PBOInterface
Polymorphism
project pak dimas

Source History | D... S... M... F... G... B... C... E... I... O... P... R... W... X... Y... Z...
Search (Ctrl+F)
225.2/269.0MB
10:14 PM 12/26/2019
1
2
3
4
5
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10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

public class DemoTextField {
    public static void main(String[] args){
        Utama u = new Utama();
        JLabel nama = new JLabel("Nama : ");
        JLabel password = new JLabel("Password : ");
        JTextField inputNama = new JTextField(15);
        JPasswordField inputpsw = new JPasswordField(15);
        JPanel panel = new JPanel();
        panel.add(nama);
        panel.add(inputNama);
        panel.add(password);
        panel.add(inputpsw);
        u.add(panel);
    }
}

```

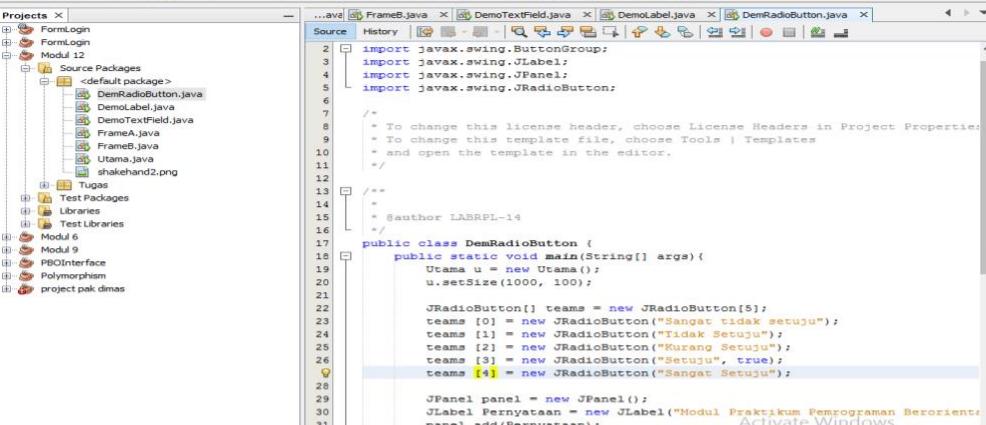
- Output



Konstruktor	Penjelasan
JTextField()	Text Field kosongtanpatulisan.
JTextField(inti)	Text Field denganpanjang yang ditentukan.
JTextField(String i)	Teks Field denganteks yang sudahditentukan.
JTextField(String teks, inti)	Teks Field denganteksdanpanjangkolom yang sudahditentukan

Parameter dalam class JTextField	Penjelasan
String Text	Teksdalam Text Field.
Boolean Editable	Menentukanbisatidaknyateksdalam Text Field untukdiedit.
Int columns	Jumlahkolompada Text Field.
InhorizontalAlignment	Perataan horizontal pada Text Field.

Radio Button dan Checkbox



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

- MenuBar:** File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help.
- Toolbar:** Standard icons for file operations like Open, Save, Print, etc.
- Project Explorer (Projects tab):** Shows the project structure under "Modul 12".
 - FormLogin
 - FormLogin
 - Modul 12
 - Source Packages
 - default package
 - DemRadioButton.java
 - DemoLabel.java
 - DemoTextField.java
 - FrameA.java
 - FrameB.java
 - Utama.java
 - shakehand2.png
 - Tugas
 - Test Packages
 - Libraries
 - Test Libraries
- Code Editor:** The current file is DemRadioButton.java.

```
import javax.swing.ButtonGroup;
import javax.swing.JLabel;
import javax.swing.JPanel;
import javax.swing.JRadioButton;

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

/**
 *
 * @author LABRPL-14
 */
public class DemRadioButton {
    public static void main(String[] args){
        Utama u = new Utama();
        u.setSize(1000, 100);

        JRadioButton[] teams = new JRadioButton[5];
        teams [0] = new JRadioButton("Sangat tidak setuju");
        teams [1] = new JRadioButton("Tidak Setuju");
        teams [2] = new JRadioButton("Kurang Setuju");
        teams [3] = new JRadioButton("Setuju", true);
        teams [4] = new JRadioButton("Sangat Setuju");

        JPanel panel = new JPanel();
        JLabel Pernyataan = new JLabel("Modul Praktikum Pemrograman Berorientasi
Activate Windows
Go to Settings to activate Windows");
        panel.add(Pernyataan);
    }
}
```
- StatusBar:** Modul 12 (run) | running... | 27:17 | 12/26/2019 | 10:21 PM | INS

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

- Title Bar:** Modul 12 - Apache NetBeans IDE 11.1
- Menu Bar:** File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help
- Toolbar:** Standard Java development tools like New, Open, Save, Cut, Copy, Paste, Find, etc.
- Project Explorer (Projects X):** Shows the project structure with packages like FormLogin, Modul 12, and Source Packages containing files such as DemRadioButton.java, DemoLabel.java, DemoTextField.java, DemoTextPanel.java, FrameB.java, Utama.java, and shakehand2.png.
- Code Editor (Source Tab):** Displays Java code for a JPanel named panel. The code initializes three JRadioButtons (teams[1], teams[2], teams[3]) with labels "Tidak Setuju", "Setuju", and "Sangat Setuju" respectively. It then adds these buttons to a ButtonGroup named group and finally adds the group to the panel.
- Code Editor (History Tab):** Shows the history of changes made to the file.
- Code Editor (DemoRadioButton.java Tab):** Shows the source code for the DemRadioButton.java file.
- Code Editor (DemoLabel.java Tab):** Shows the source code for the DemLabel.java file.
- Code Editor (DemoTextField.java Tab):** Shows the source code for the DemoTextField.java file.
- Code Editor (FrameB.java Tab):** Shows the source code for the FrameB.java file.
- Code Editor (Utama.java Tab):** Shows the source code for the Utama.java file.
- Status Bar:** Shows the message "Activate Windows Go to Settings to activate Windows", the current run configuration "Modul 12 (run)", and the system status "running...".
- System Tray:** Shows icons for network connection, battery, volume, and system time (10:21 PM).

- Output

The screenshot shows the Apache NetBeans IDE interface. The title bar reads "Modul 12 - Apache NetBeans IDE 11.1". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has icons for New, Open, Save, Cut, Copy, Paste, Find, Replace, and others. The Projects tab shows a "Belajar mengenal GUI" project with sub-folders like FormLogin, FormLogin, and Belajar mengenal GUI. The Source tab is selected, displaying Java code for a JFrame named "Frame1.java". The code creates a frame with a panel containing a label and several buttons. The Output tab at the bottom shows "Modul 12 (run)" with status "RUNNING...". The bottom right corner shows the system tray with icons for network, battery, and time (27:17). A watermark "Activate Windows Go to Settings to activate Windows." is visible in the center.

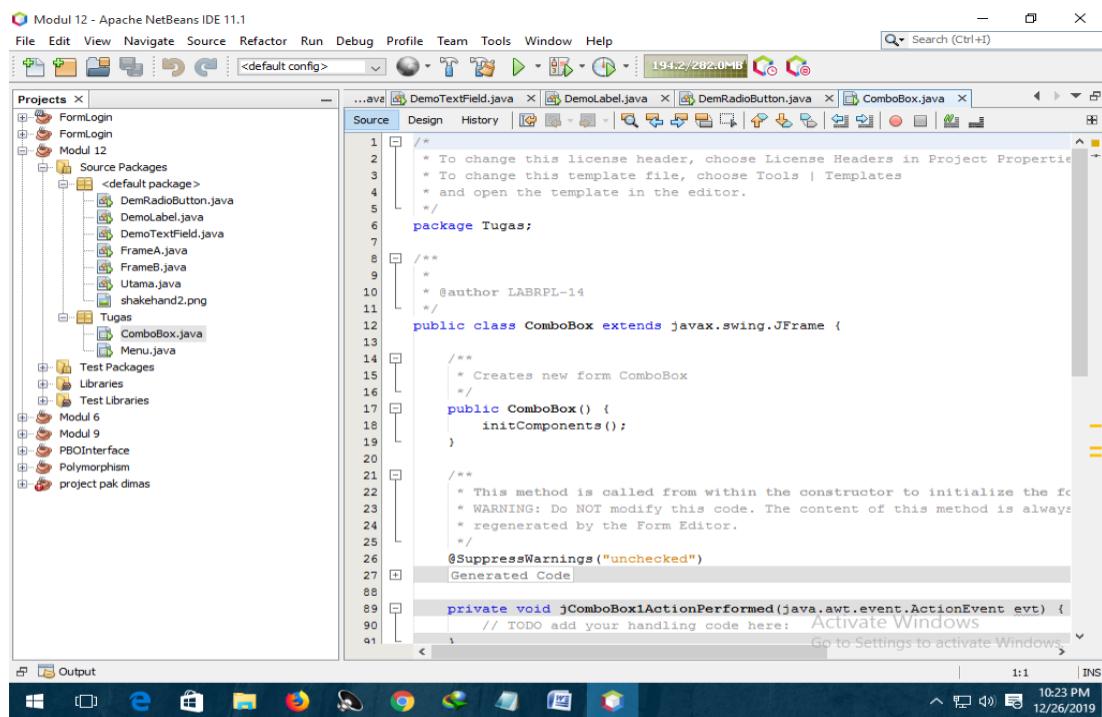
Konstruktor	Penjelasan
JCheckBox(String Teks)	Check box dengan teks yang ditentukan.
JCheckBox(String, Boolean)	Check box dengan teks yang ditentukan, jika kondisi pada parameter kedua true maka Check box ini akan dipilih.
JCheckBox(icon)	Check box dengan gambar icon.
JCheckBox(icon, Boolean)	Check box 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.
----------------------------------	--

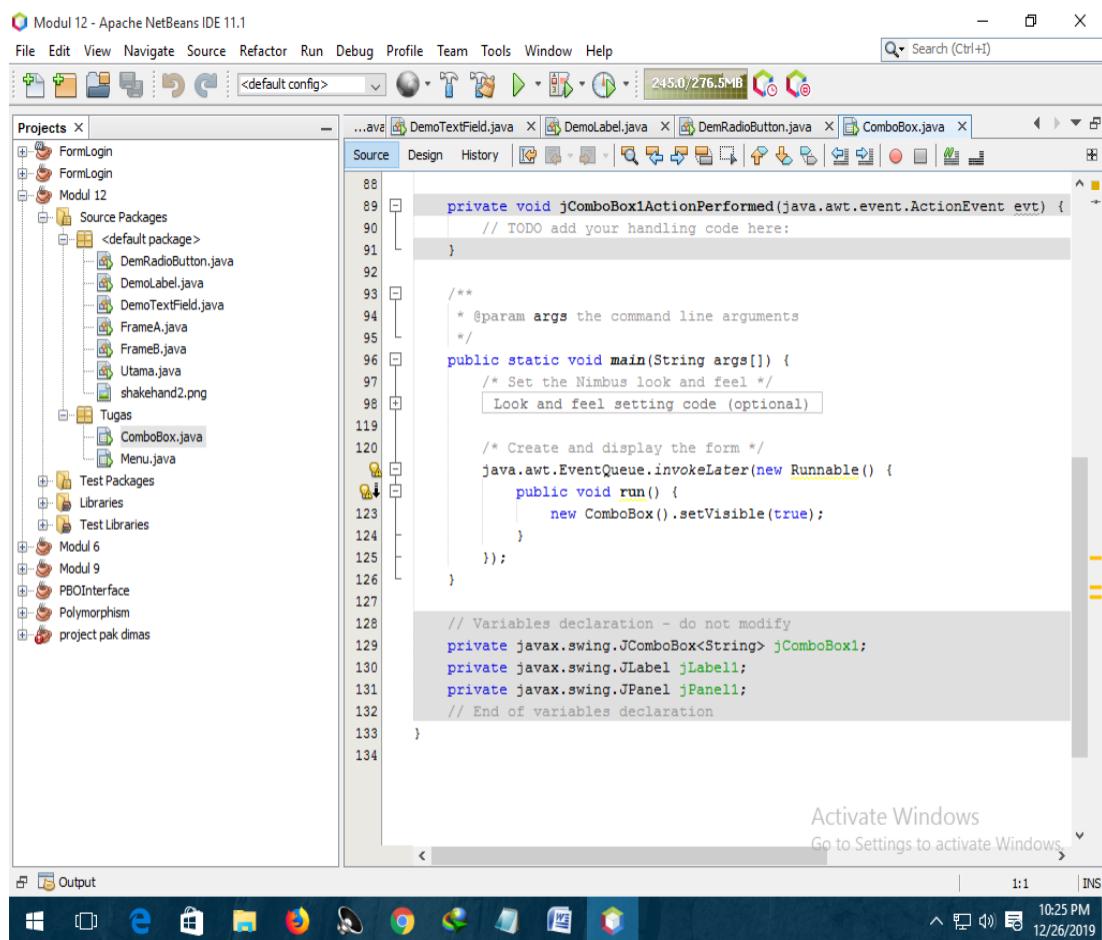
❖ TUGAS

Membuat program GUI berdasarkan output

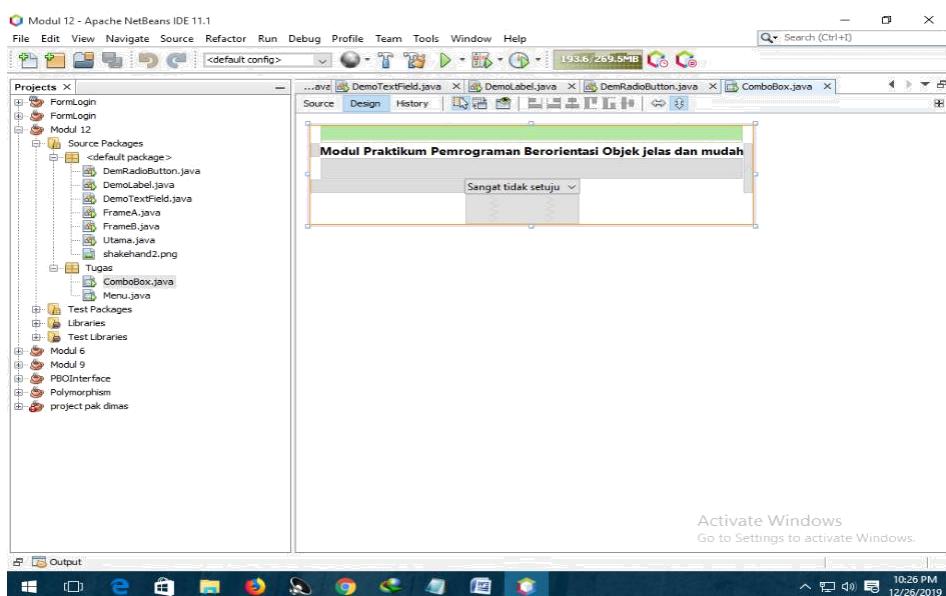
1. Menggunakan class JComboBox untuk membuat program GUI berdasarkan gambar



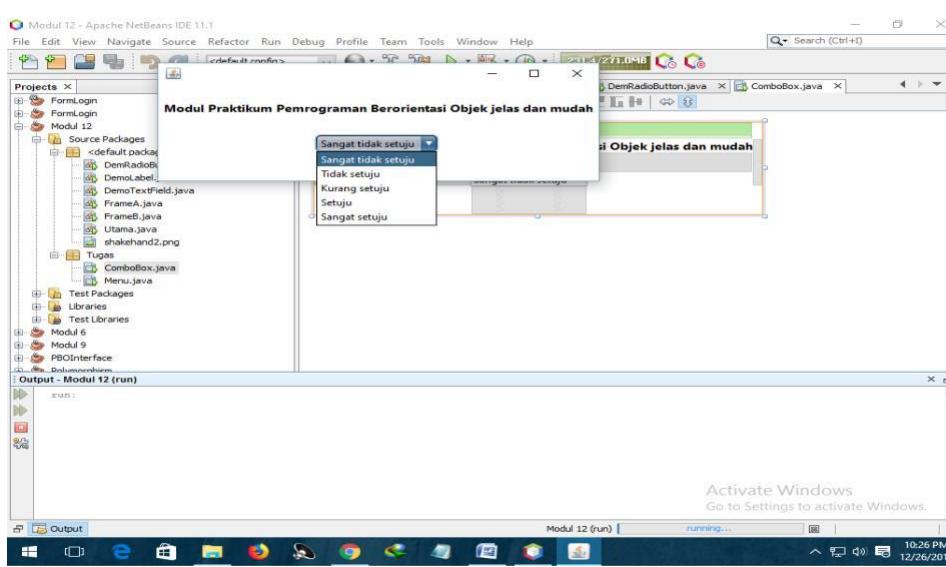
```
Modul 12 - Apache NetBeans IDE 11.1
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Projects X ...ava DemoTextField.java X DemoLabel.java X DemRadioButton.java X ComboBox.java X
Source Design History ...
1 /**
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates.
 * and open the template in the editor.
 */
6 package Tugas;
7
8 /**
9 *
10 * @author LABRPL-14
11 */
12 public class ComboBox extends javax.swing.JFrame {
13
14     /**
15      * Creates new form ComboBox
16     */
17     public ComboBox() {
18         initComponents();
19     }
20
21     /**
22      * This method is called from within the constructor to initialize the fo
23      * WARNING: Do NOT modify this code. The content of this method is always
24      * regenerated by the Form Editor.
25     */
26     @SuppressWarnings("unchecked")
27     // Generated Code
28
29     private void jComboBox1ActionPerformed(java.awt.event.ActionEvent evt) {
30         // TODO add your handling code here: Activate Windows
31         Go to Settings to activate Windows
32     }
33
34 }
```



```
Modul 12 - Apache NetBeans IDE 11.1
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Projects X ...ava DemoTextField.java X DemoLabel.java X DemRadioButton.java X ComboBox.java X
Source Design History ...
88
89     private void jComboBox1ActionPerformed(java.awt.event.ActionEvent evt) {
90         // TODO add your handling code here:
91     }
92
93     /**
94      * @param args the command line arguments
95     */
96     public static void main(String args[]) {
97         /* Set the Nimbus look and feel */
98         Look and feel setting code (optional)
99
100        /* Create and display the form */
101        java.awt.EventQueue.invokeLater(new Runnable() {
102             public void run() {
103                 new ComboBox().setVisible(true);
104             }
105         });
106
107
108        // Variables declaration - do not modify
109        private javax.swing.JComboBox<String> jComboBox1;
110        private javax.swing.JLabel jLabel1;
111        private javax.swing.JPanel jPanel1;
112        // End of variables declaration
113    }
114
115 }
```



Output



2. Membuat program GUI untuk menambah menu. Apabila salah satu menu dipilih maka akan mengubah warna background

The screenshot shows the Apache NetBeans IDE 11.1 interface. The title bar reads "Modul 12 - Apache NetBeans IDE 11.1". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has icons for New Project, Open Project, Save, Undo, Redo, Cut, Copy, Paste, Find, Replace, and others. The left sidebar displays the "Projects" view with modules "Form Login", "FormLogin", "Modul 12", "Test Packages", "Libraries", and "Test Libraries". Under "Modul 12", there are "Source Packages" containing "Tugas" and "Utama", and "Image" files "shakehand2.png" and "Modul 6", "Modul 9", "PBOInterface", "Polymorphism", and "project pak dimas". The main workspace shows the code editor for "Menu.java" with Java code for a Swing application. The status bar at the bottom shows "Activate Windows" and the system tray indicates the date and time as 12/26/2019.

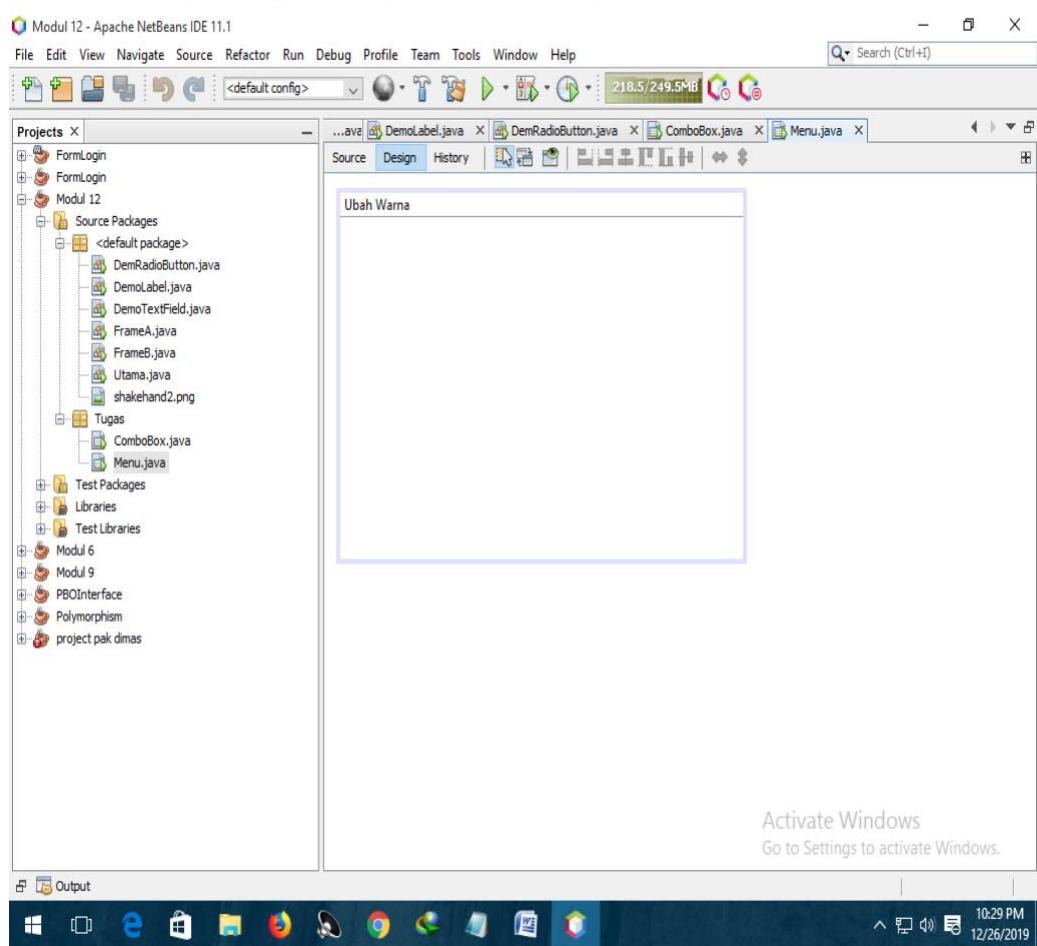
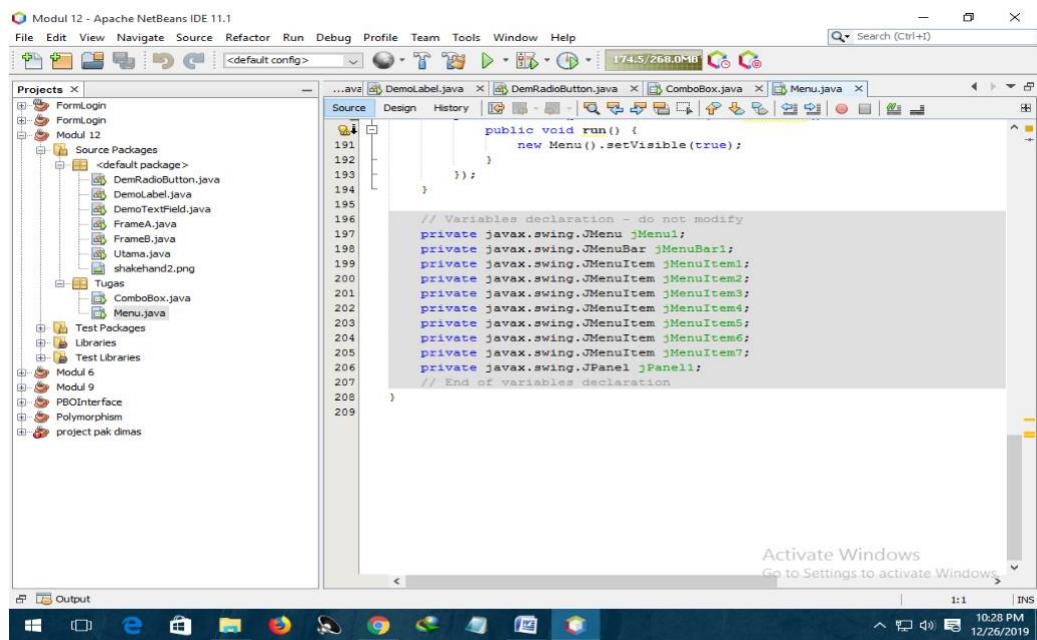
The screenshot shows the Apache NetBeans IDE interface with the following details:

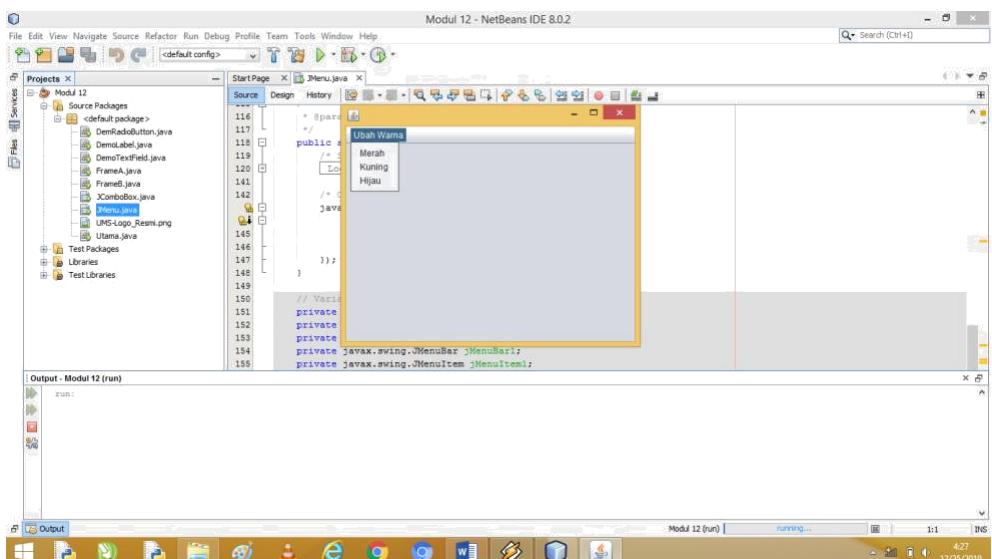
- File Menu:** File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help.
- Search Bar:** Search (Ctrl+F).
- Projects Tab:** Shows a tree view of projects and source packages. Projects include FormLogin, Modul1, and Modul12. Under Modul12, there are Source Packages (default package), DemiradioButton.java, Demirlabel.java, Demirradiobutton.java, Demirtextfield.java, FrameA.java, FrameB.java, Utama.java, shakelhand2.png, and Tuguh.java. Under Tuguh.java, there are Combobox.java and Menu.java.
- Code Editor:** The current file is Demirlabel.java. The code is as follows:

```
126     private void jMenuItem1ActionPerformed(java.awt.event.ActionEvent evt) {  
127         // TODO add your handling code here:  
128         jPanel1.setBackground(Color.red);  
129     }  
130  
131     private void jMenuItem2ActionPerformed(java.awt.event.ActionEvent evt) {  
132         // TODO add your handling code here:  
133         jPanel1.setBackground(Color.orange);  
134     }  
135  
136     private void jMenuItem3ActionPerformed(java.awt.event.ActionEvent evt) {  
137         // TODO add your handling code here:  
138         jPanel1.setBackground(Color.yellow);  
139     }  
140  
141     private void jMenuItem4ActionPerformed(java.awt.event.ActionEvent evt) {  
142         // TODO add your handling code here:  
143         jPanel1.setBackground(Color.green);  
144     }  
145  
146     private void jMenuItem5ActionPerformed(java.awt.event.ActionEvent evt) {  
147         // TODO add your handling code here:  
148         jPanel1.setBackground(Color.blue);  
149     }  
150  
151     private void jMenuItem6ActionPerformed(java.awt.event.ActionEvent evt) {  
152         // TODO add your handling code here:  
153         jPanel1.setBackground(Color.magenta);  
154     }  
155  
156     private void jMenuItem7ActionPerformed(java.awt.event.ActionEvent evt) {  
157         // TODO add your handling code here:  
158     }  
159 }
```

The code implements seven menu items (jMenuItem1 to jMenuItem7) that change the background color of a JPanel named jPanel1. The colors are red, orange, yellow, green, blue, magenta, and white (the last one is commented out). The code is part of a Java Swing application.

The screenshot shows the Apache NetBeans IDE 11.1 interface. The top menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, and Help. A search bar is located at the top right. The left sidebar displays the 'Projects' tree, which contains several Java source files under 'Modul 12' and 'Tugas'. The main workspace shows the 'Source' tab of the 'Menu.java' file, containing Java code for a menu item action and the main application entry point. The bottom status bar shows the build output, with '1:1' and 'INS' indicators, and the date '12/26/2019'.





Output

