

NAMA : SURYO PRAMUDA WICAKSONO

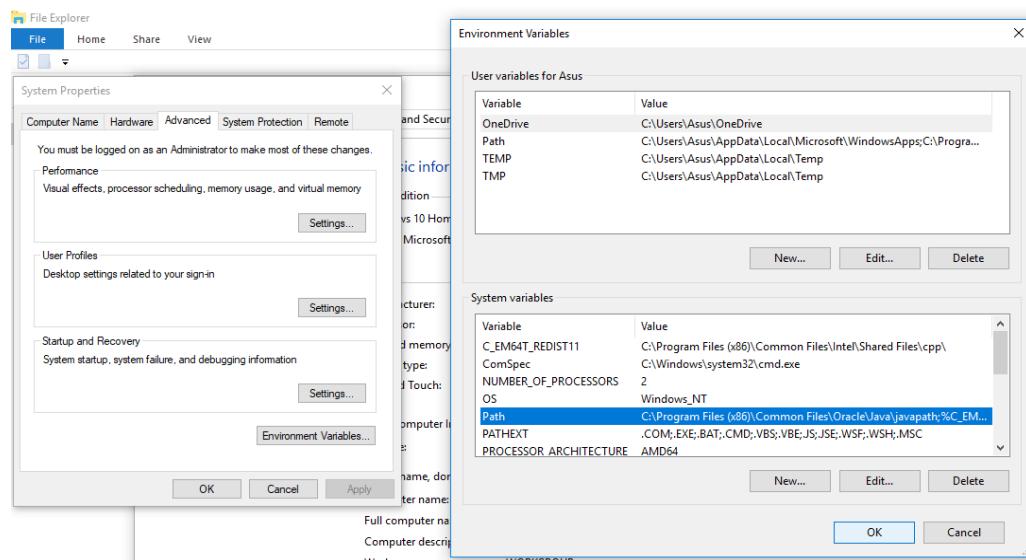
NIM : L200180053

KELAS : B

TUGAS : BAB 1 – BAB 12

BAB 1

path



Program.java

A screenshot of a Windows desktop environment. On the left, a 'Windows Command Processor' window shows the compilation and execution of a Java program named 'Program'. The command history includes navigating to the directory 'D:\Roti', compiling 'RotiDemo.java' (which fails due to undeclared symbols), and then successfully running 'Program.java' which prints 'Hello World'. On the right, a 'Program.java - Notepad' window displays the source code of the Java program. The code defines a class 'Program' with a main method that prints 'Hello World' to the console.

```

Windows Command Processor
symbol: variable warna
location: class Roti
4 errors

D:\>RotiDemo.java
D:\>Roti.java
D:\>javac RotiDemo.java
D:\>javac Roti.java:3: error: cannot find symbol
      warna = warnaRoti;
           ^
symbol: variable warna
location: class Roti
2 errors

D:\>javac RotiDemo.java
Jalne Roti : hijau
Rasa Roti : pandan
Berat Roti : 30
grHarga Roti : Rp. 6000.0

D:\>javac Program.java
D:\>java Program
Hello world

D:\>java RotiDemo
Jalne Roti : hijau
Rasa Roti : pandan
Berat Roti : 30
grHarga Roti : Rp. 6000.0
D:\>javac RotiDemo.java
D:\>java RotiDemo
Jalne Roti : hijau
Rasa Roti : pandan
Berat Roti : 30
grHarga Roti : Rp. 6000.0
D:\>

```

```

public class Roti{
    public static void main(String[] args) {
        Roti roti = new Roti();
        roti.beriwarna("hijau");
        roti.beriRasa("pandan");
        roti.timbangBerat(30);
        roti.infoRoti();
        roti.infoRoti();
    }
}

symbol: variable warna
location: class Roti
2 errors

D:\>javac RotiDemo.java
D:\>java RotiDemo
Jalne Roti : hijau
Rasa Roti : pandan
Berat Roti : 30
grHarga Roti : Rp. 6000.0
D:\>javac Program.java
D:\>java Program
Hello world

D:\>java RotiDemo
Jalne Roti : hijau
Rasa Roti : pandan
Berat Roti : 30
grHarga Roti : Rp. 6000.0
D:\>

```

```

public class Roti {
    String warna;
    String rasa;
    int berat;
    double harga;
    void beriwarna(String warnaRoti) {
        warna = warnaRoti;
    }
    void beriRasa(String rasaRoti) {
        rasa = rasaRoti;
    }
    void timbangBerat(int beratRoti) {
        berat = beratRoti;
    }
    void hargajual(double hargakotri){
        harga = hargakotri;
    }
    void infoRoti() {
        System.out.println(
            "warna Roti :" + warna + "\n" +
            "Rasa Roti :" + rasa + "\n" +
            "Berat Roti :" + berat + "\n" +
            "Harga Roti : Rp. " + harga );
    }
}

```

BAB 2

1. Hewan

Local Disk (D):

```

File Home Share View
This PC Local Disk (D:) >
Desktop Downloads Documents Pictures This PC Laporan Praktikum Pbo Local Disk (D:) PrakPBO Modul 2 Proposal OPREC OneDrive This PC Desktop Documents Downloads Music Pictures Videos OS (C:) Local Disk (D:) LOCAL (E:) SYSTEM (F:) Network Homegroup

```

D:\>javac Car.java
D:\>javac CarDemo.java
D:\>java CarDemo
Berat Ikan :145 KgHarga Ikan : Rp.2000000.0
D:\>javac Hewan.java
D:\>javac HewanDemo.java
D:\>java HewanDemo
Nama Hewan :harimau
Jumlah Kaki :4
Makanan :daging
Type Hewan :karnivora
Nama Hewan :kerbau
Jumlah Kaki :4
Makanan :rumput
Type Hewan :herbifora
D:\>

```

Hewan.java - Notepad
File Edit Format View Help
public class Hewan{
    String nama;
    int jumlahkaki;
    String makanan;
    String typehewan;
    void Namahewan(String namaHewan){
        nama = namaHewan;
    }
    void Jumlahkaki(int jumlahkakiHewan){
        jumlahkaki = jumlahkakiHewan;
    }
    void Makanan(String makananHewan ){
        makanan = makananHewan;
    }
    void Jenis(String typeHewan){
        typehewan = typeHewan;
    }
    void printInfo() {
        System.out.println(
            "Nama Hewan :" + nama + "\n" +
            "Jumlah Kaki :" + jumlahkaki +
            "Makanan :" + makanan + "\n" +
            "Type Hewan :" + typehewan);
    }
}

```

```

HewanDemo.java - Notepad
File Edit Format View Help
public class HewanDemo{
    public static void main(String[] args) {
        Hewan hewan1 = new Hewan();
        Hewan hewan2 = new Hewan();

        hewan1.Namahewan("harimau");
        hewan1.Jumlahkaki(4);
        hewan1.Makanan("daging");
        hewan1.Jenis("karnivora");
        hewan1.printInfo();

        hewan2.Namahewan("kerbau");
        hewan2.Jumlahkaki(4);
        hewan2.Makanan("rumput");
        hewan2.Jenis("herbifora");
        hewan2.printInfo();
    }
}

```

2. Dosen

```

Local Disk (D):
File Home Share View
This PC Local Disk (D:) Name
Quick access Command Prompt
ChangeGear :2
Cadence :30
SpeedUp :10
changeGear :1
D:\>javac Hewan.java
D:\>javac HewanDemo.java
D:\>java HewanDemo
Nama Hewan :harimau
Jumlah Kaki :4
Makanan :daging
Type Hewan :karnivora
Nama Hewan :kerbau
Jumlah Kaki :4
Makanan :rumput
Type Hewan :herbifora
D:\>javac Dosen.java
D:\>javac DosenDemo.java
D:\>java DosenDemo
Nama Dosen :Willi susanti
Nik Dosen :200180060
Pendidikan Dosen :S1 Informatika
TglLahir Dosen :25 September 2019
D:\>

```

```

D:\>javac Dosen.java
D:\>java DosenDemo
Nama Dosen :Willi susanti
Nik Dosen :200180060
Pendidikan Dosen :S1 Informatika
TglLahir Dosen :25 September 2019

```

```

D:\>javac Dosen.java
D:\>java DosenDemo
Nama Dosen :Willi susanti
Nik Dosen :200180060
Pendidikan Dosen :S1 Informatika
TglLahir Dosen :25 September 2019

```

3. Karyawan

```

Local Disk (D):
File Home Share View
This PC Local Disk (D:) Name
Quick access Command Prompt
D:\>javac DosenDemo.java
D:\>java DosenDemo
Nama Dosen :Willi susanti
Nik Dosen :200180060
Pendidikan Dosen :S1 Informatika
TglLahir Dosen :25 September 2019
D:\>javac Mahasiswa.java
D:\>javac MahasiswaDemo.java
D:\>java MahasiswaDemo
Nama Mahasiswa :Ari Wibowo
Nim Mahasiswa :1200180056
Alamat Mahasiswa :Purwodadi
Jumlah Semester :3
D:\>javac Karyawan.java
D:\>javac KaryawanDemo.java
D:\>java KaryawanDemo
Nama Karyawan :Suryo
Alamat Karyawan :Jambean
Jabatan Karyawan :ketua Mahasiswa
Jumlah gaji : Rp. 1000.0
D:\>

```

```

D:\>javac Karyawan.java
D:\>java Karyawan
Nama Karyawan :Suryo
Alamat Karyawan :Jambean
Jabatan Karyawan :ketua Mahasiswa
Jumlah gaji : Rp. 1000.0

```

4. Mahasiswa

The screenshot shows a Windows desktop environment with three open windows:

- Local Disk (D):** A File Explorer window showing the directory structure: This PC > Local Disk (D) > Name. It lists several files and folders, including **MobilDemo.class** and **MobilDemo.java**.
- File Explorer:** A standard Windows File Explorer window showing the same directory structure and file list.
- Command Prompt:** A terminal window displaying Java code execution. The output shows:

```
Nama Hewan :harimau
Jumlah Kaki :4
Makanan :daging
Type Hewan :karnivora
Nama Hewan :kerbau
Jumlah Kaki :4
Makanan :rumput
Type Hewan :herbifora

D:\>javac Dosen.java

D:\>javac DosenDemo.java

D:\>java DosenDemo
Nama Dosen :Willi susanti
Nik Dosen :200100060
Pendidikan Dosen :SI Informatika
TglLahir Dosen :25 September 2019

D:\>javac Mahasiswa.java

D:\>javac MahasiswaDemo.java

D:\>java MahasiswaDemo
Nama Mahasiswa :Ari Wibowo
Nim Mahasiswa :L200180056
Alamat Mahasiswa :Purwodadi
Jumlah Semester :3
```
- MahasiswaDemo.java - Notepad:** A code editor window containing the following Java code:

```
public class MahasiswaDemo{
    public static void main(String[] args){
        Mahasiswa mahasiswa = new Mahasiswa();
        mahasiswa.tampilkanNama("Ari Wibowo");
        mahasiswa.tampilkanNim("L200180056");
        mahasiswa.tampilkanAlamat("Purwodadi");
        mahasiswa.infoMahasiswa();
    }
}
```
- Mahasiswa.java - Notepad:** A code editor window containing the following Java code:

```
public class Mahasiswa{
    String nama;
    String nim;
    String alamat;
    int semester;

    void tampilkanNama(String namaMahasiswa){
        nama = namaMahasiswa;
    }

    void tampilkanNim(String nimMahasiswa){
        nim = nimMahasiswa;
    }

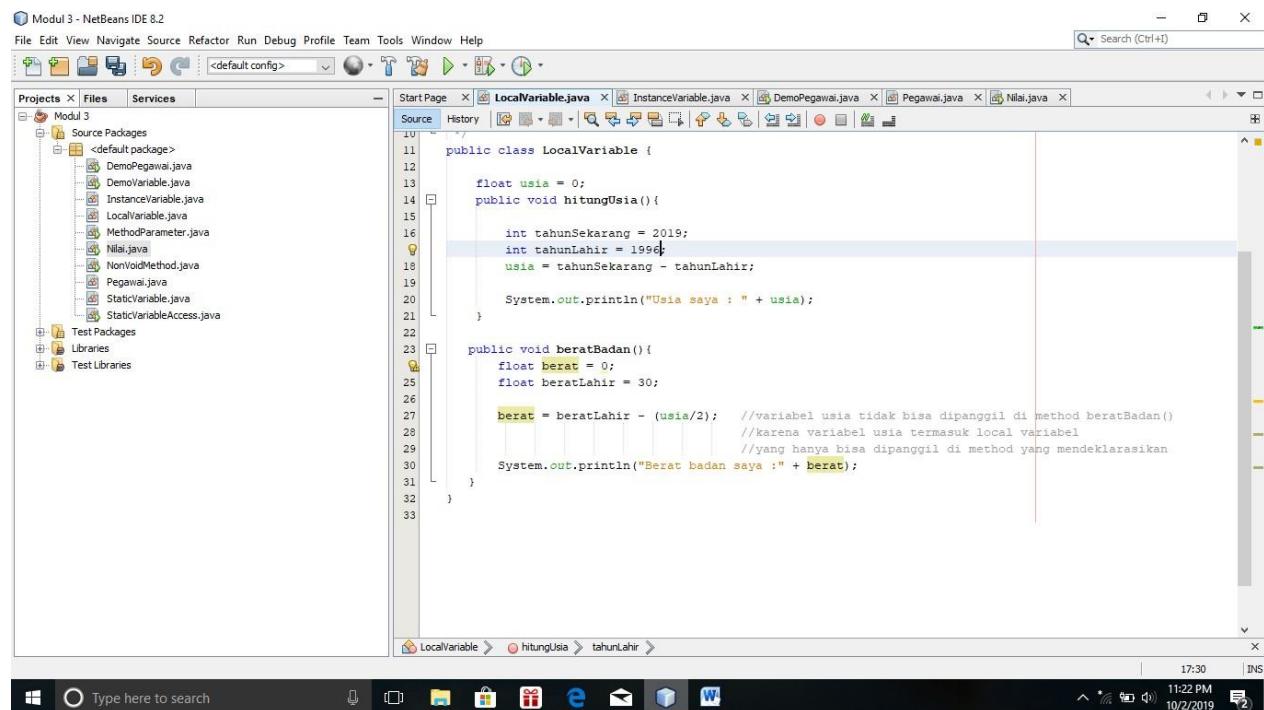
    void tampilkanAlamat(String alamatMahasiswa){
        alamat = alamatMahasiswa;
    }

    void jumlahSemester(int semesterMahasiswa){
        semester = semesterMahasiswa;
    }

    void infoMahasiswa() {
        System.out.println(
            "Nama Mahasiswa :" + nama + "\n" +
            "Nim Mahasiswa :" + nim + "\n" +
            "Alamat Mahasiswa :" + alamat + "\n" +
            "Jumlah Semester :" + semester );
    }
}
```

BAB 3

Latihan 1 bab3



Latihan 2 bab3

Modul 3 - NetBeans IDE 8.2

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

Projects Files Services

Start Page LocalVariable.java InstanceVariable.java DemoPegawai.java Pegawai.java Nilaи.java

Source History

```
10  */
11  public class InstanceVariable {
12
13     float usia = 0;
14
15     public void hitungUsia(){
16         int tahunSekarang = 2019;
17         int tahunLahir = 1990;
18         usia = tahunSekarang - tahunLahir;
19
20         System.out.println("Usia saya : " + usia);
21     }
22
23     public void beratBadan(){
24         float berat = 0;
25         float beratLahir = 30;
26
27         berat = beratLahir - (usia/2);
28         System.out.println("Berat badan saya :" + berat);
29     }
30
31 }
```

InstanceVariable > hitungUsia > tahunLahir

Type here to search

11:23 PM 10/2/2019

LATIHAN 3 BAB3

Modul 3 - NetBeans IDE 8.2

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

Projects Files Services

Start Page LocalVariable.java InstanceVariable.java DemoPegawai.java Pegawai.java Nilai.java

Source History

```
10 */
11 public class Pegawai {
12     String nama;
13     int nip;
14     double gaji;
15
16     void beriNama(String nama){
17         this.nama = nama;
18     }
19     void beriNip(int nip_peg){
20         nip = nip_peg;
21     }
22     void tambahGaji(double gaji_peg){
23         gaji = gaji_peg;
24     }
25
26     void cetakPegawai(){
27         System.out.println(
28             "Nama Pegawai : " + nama + "\n" +
29             "NIP Pegawai : " + nip + "\n" +
30             "Gaji Pegawai : Rp. " + gaji + "\n"
31         );
32     }
33 }
34
35 }
```

9:16 11:24 PM 10/2/2019

Type here to search

Modul 3 - NetBeans IDE 8.2

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

Projects Files Services

Start Page LocalVariable.java InstanceVariable.java DemoPegawai.java Pegawai.java Nilai.java

Source History

```
10 */
11 public class DemoPegawai {
12     public static void main(String[] args){
13         Pegawai pgw1 = new Pegawai();
14         pgw1.beriNama("Awik");
15         pgw1.beriNip(1800111222);
16         pgw1.tambahGaji(3000000);
17         pgw1.cetakPegawai();
18
19         Pegawai pgw2 = new Pegawai();
20         pgw2.beriNama("Ardi");
21         pgw2.beriNip(1800444666);
22         pgw2.tambahGaji(3500000);
23         pgw2.cetakPegawai();
24
25         Pegawai pgw3 = new Pegawai();
26         pgw3.beriNama("Daru");
27         pgw3.beriNip(1800997779);
28         pgw3.tambahGaji(2500000);
29         pgw3.cetakPegawai();
30
31         Pegawai pgw4 = new Pegawai();
32         pgw4.beriNama("Wingsih");
33         pgw4.beriNip(1800332211);
34         pgw4.tambahGaji(4000000);
35         pgw4.cetakPegawai();
36
37         Pegawai pgw5 = new Pegawai();
38         pgw5.beriNama("Astrin");
39         pgw5.beriNip(1800556633);
40         pgw5.tambahGaji(4000000);
    }
```

30:9 11:25 PM 10/2/2019

Type here to search

HASIL

```
run:
Name Pegawai : Avik
NIP Pegawai : 1800111222
Gaji Pegawai : Rp. 3000000.0

Name Pegawai : Ardi
NIP Pegawai : 1800444666
Gaji Pegawai : Rp. 3500000.0

Name Pegawai : daru
NIP Pegawai : 1800597779
Gaji Pegawai : Rp. 2500000.0

Name Pegawai : Ningrah
NIP Pegawai : 1800332211
Gaji Pegawai : Rp. 4000000.0

Name Pegawai : Astrin
NIP Pegawai : 1800556633
Gaji Pegawai : Rp. 4000000.0

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

Finished building Modul 3 (run).

```
public class Nilai {
    double nilaiUTS;
    double nilaiUAS;
    double nilaiTugas;
    double nilaiTotal;

    void n_uts(double UTS) {
        nilaiUTS = UTS;
    }

    void n_uas(double UAS) {
        nilaiUAS = UAS;
    }

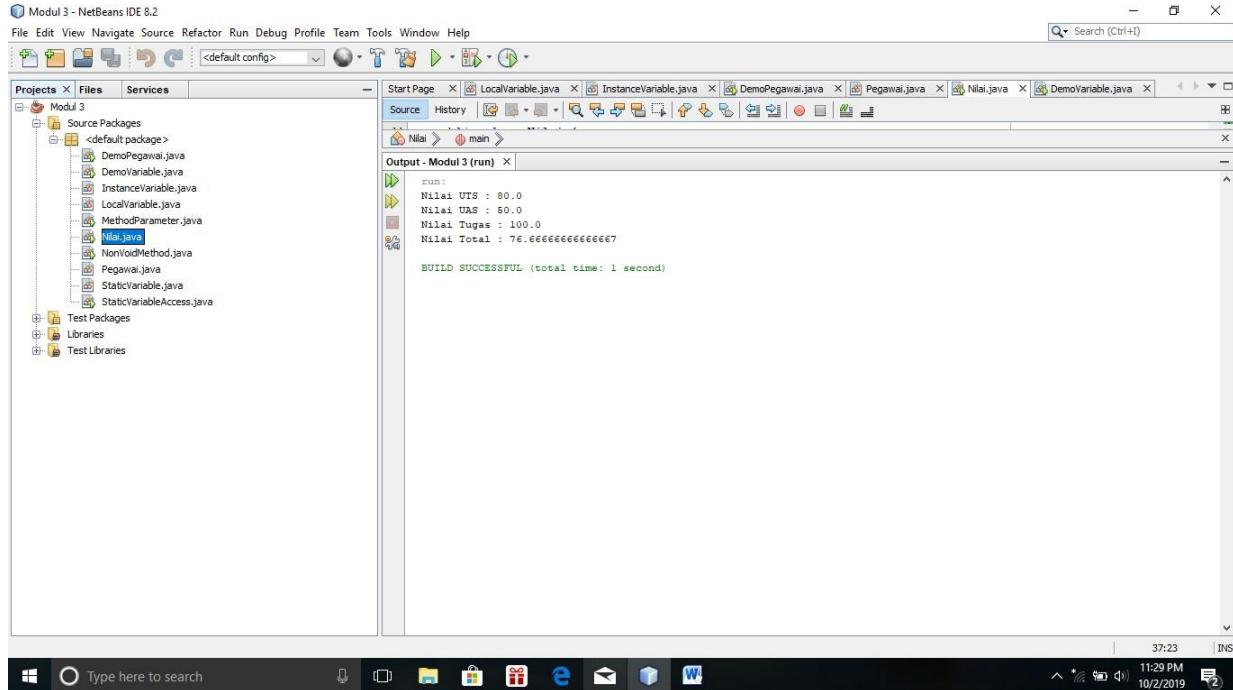
    void n_tug(double Tugas) {
        nilaiTugas = Tugas;
    }

    void cetakNilai() {
        nilaiTotal = ((nilaiUTS + nilaiUAS + nilaiTugas)/3);
        System.out.println(
            "Nilai UTS : " + nilaiUTS + "\n" +
            "Nilai UAS : " + nilaiUAS + "\n" +
            "Nilai Tugas : " + nilaiTugas + "\n" +
            "Nilai Total : " + nilaiTotal + "\n");
    }

    public static void main (String[] args){
        Nilai nilail = new Nilai();
        nilail.n_uts(80);
        nilail.n_uas(90);
        nilail.n_tug(100);
        nilail.cetakNilai();
    }
}
```

Tugas pekerjaan rumah

HASIL



BAB 4

Private modifier pada package modul4 berhasil diakses

modul4 - NetBeans IDE 8.2

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

Source History

PrivatModifier.java Private.java Protected.java Protectednew.java defaultnew.java Default.java modpublic.java

Output - modul4 (run) x

run:
private modifier suryo
BUILD SUCCESSFUL (total time: 5 seconds)

modul4 - NetBeans IDE 8.2

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

Source History

Default.java Mod4.java PrivatModifier.java Protected.java Protectednew.java defaultnew.java Default.java Private.java

Output - modul4 (run) x

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

Default modifier pada package modul4 berhasil diakses

The image displays two side-by-side Java IDE windows, likely from NetBeans, illustrating the visibility of a class defined in a different package.

Top Window (Screenshot 1):

- Shows the code for `defaultnew.java` in the `modul4` package.
- The code defines a class `defaultnew` with a `jumlah` method that adds two integers and prints the result.
- The `Output - modul4 (run)` tab shows the build was successful and the output is "3".

Bottom Window (Screenshot 2):

- Shows the code for `Default.java` in a different package.
- The code defines a class `Default` with a `main` method that creates an instance of `defaultnew` and calls its `jumlah` method.
- The `Output - modul4 (run)` tab shows the build was successful and the output is "3".

Saya coba pada package yang lain. Sebelumnya pada package “modul4” sekarang saya coba pada package “modul4.newpackage” dan hasilnya salah error karena tidak dapat diakses jika berbeda package

Protected modifier pada package modul4 berhasil diakses

Publick modifier pada package modul4 berhasil diakses

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

- Project Explorer (Left):** Shows the project structure for "mod44". It includes a Source Packages folder containing "Default.java", "Mod44.java", "PrivateModifier.java", "Private.java", "Protected.java", "protected.java", "modpublic.java", and "pubmod1.java". It also contains a mod44 namespace package and several test files like "TestPackages", "Libraries", and "TestLibraries".
- Code Editor (Center):** Displays the content of "modpublic.java". The code defines a public class "pubmod1" with methods "kali()", "bagi()", and "bagi1()".

```
1  /* To change this license header, choose License Headers in Project Properties.
2   * To change this template file, choose Tools | Templates
3   * and open the template in the editor.
4   */
5
6  package mod44;
7
8  /**
9   * @author LABRFL-14
10  */
11
12  public class pubmod1 {
13      public int a = 2;
14      public int b = 5;
15      public int c = 9;
16      public void kali(){
17          int d = a*b*c;
18          System.out.println("basil kali adalah "+d);
19      }
20      public void bagi(){
21          int e = a*c/b*c;
22          System.out.println("basil bagi adalah "+e);
23      }
24  }
```
- Output Window (Bottom):** Shows the execution results of the code:

```
run:
basil kali adalah 90
basil bagi adalah 9
basil bagi adalah 18
Process finished (total time: 2 seconds)
```

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

- Project Explorer (left):** Shows a project named "modul" containing source packages "modul" and "modultest". The "modul" package contains files: Default.java, Modifiable.java, PrivateModifier.java, Private.java, Protected.java, ProtectedEnc.java, default.java, modulpublic.java, and modulmod.java.
- Java Editor (center):** Displays the content of modulpublic.java. The code defines a public class modul with a main method that creates and calls methods from a public class modulmod.
- Output View (bottom):** Shows the terminal output for the run configuration "modul (run)". The output shows three instances of the class being created and their methods being called sequentially: Kali.bash(), Kali.kell(), Kali.bagi(), and Kali.rata(). The build status is shown as "BUILD SUCCESSFUL (total time: 2 seconds)".

Saya coba pada package yang lain. Sebelumnya pada package "modul4" sekarang saya coba pada package "modul4.newpackage" dan berhasil karena public dapat diakses meski berbeda package

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

- Title Bar:** modul4 - NetBeans IDE 8.2
- Menu Bar:** File Edit View Navigate Source Refactor Run Debug Project Tools Window Help
- Toolbar:** Contains icons for New, Open, Save, Cut, Copy, Paste, Find, and others.
- Project Explorer:** Shows the project structure under "modul4".
 - Source Packages:
 - modul4
 - modul4.java
 - Default.java
 - Protected.java
 - Private.java
 - Protected2.java
 - Protected3.java
 - Protected4.java
 - modpub2.java
 - publicmod.java
 - Test Packages
 - Libraries
 - Test Libraries
- Code Editor:** The main editor window displays the file `modpub2.java`. The code is as follows:

```
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 file in the editor.
4 //
5 package modul4.newpackage;
6
7 import modul4.publicmod;
8
9 /**
10  * 
11  * @author LABRPL-14
12  */
13
14 public class modpub2 {
15     public static void main(String[] args) {
16         publicmod Kali = new publicmod();
17         Kali.bagi();
18         Kali.bagi();
19         Kali.rata();
20     }
21 }
```
- Output Window:** Shows the build results for "modul4 (run)".

```
Output - modul4 (run) x
run
[run]
hash kali addah 90
hash bagi addah 5
hash rata addah 10
BUILD SUCCESSFUL (total time: 1 second)
```

BAB 5

Latihan 5

Default constructor

modul5 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects X modul5

Source Packages modul5

- Modul5.java
- buku.java
- constructorAccess.java
- constructordefault.java
- defaultcons.java
- paramConstructor.java
- parambulu.java

Test Packages

Libraries

Test Libraries

ProjectahrPBO

Source Packages <default package>

- CarForm.java
- CustomerForm.java
- Loginform.java
- Print.java
- abstraction.java
- datamobil.java
- interface2.java
- interfaces.java
- koneks.java
- mankoneks.java
- nested1.java
- terimakash.java

Test Packages

Libraries

Test Libraries

cdefault config > Source History

defaultcons.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 modul5;
7
8  /**
9   *
10  * @author LABRPL-28
11  */
12 public class defaultcons {
13     String nama = "suryo pramuda Wocaksono";
14     String NIM = "L200180053";
15     String alamat = "Sraged";
16
17     public defaultcons () {
18         System.out.println("Nama : " + nama);
19         System.out.println("NIM : " + NIM);
20         System.out.println("Alamat : " + alamat);
21     }
22 }
23
24 }
```

Output

17:19:1/1:11 8:29 PM 12/30/2019

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

- Title Bar:** modul5 - NetBeans IDE 8.2
- Menu Bar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Search Bar:** Search (Ctrl+F)
- Toolbar:** Standard NetBeans icons for file operations.
- Projects View:** Shows the project structure with two source packages: 'modul5' and 'ProjectLabirinPOO'. 'modul5' contains files like Modul5.java, buku.java, constructorAccess.java, constructordefault.java, defaultcons.java, paramConstructor.java, and parambulu.java. 'ProjectLabirinPOO' contains files like CarForm.java, CustomerForm.java, Loginform.java, Print.java, abstraction.java, and databasehelper.java.
- Code Editor:** The 'constructordefault.java' file is open, showing the following code:

```
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 modul5;
6
7  /**
8  *
9  */
10 /**
11  * @author LABRPL-28
12 */
13 public class constructordefault {
14     public static void main(String[] args){
15         defaultcons cons = new defaultcons();
16     }
17 }
18 
```
- Output View:** Shows the build log:

```
run:
Nama : suryo pramuda Wocaksono
NIK : L200190063
Alamat : Slagen
BUILD SUCCESSFUL (total time: 0 seconds)
```
- Status Bar:** 1:1 | INS | 12/30/2019 8:29 PM

Parameterized constructor

modul5 - NetBeans IDE 8.2

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

Projects X modul5

Source Packages modul5

- Modul5.java
- buku.java
- constructorAccess.java
- constructordefault.java
- defaultcons.java
- paramConstructor.java
- parambuku.java

Test Packages

Libraries

Test Libraries

ProjectakhirPBO

Source Packages <default package>

- CarForm.java
- CustomerForm.java
- Loginform.java
- Print.java
- abstraction.java
- datamobil.java
- interface2.java
- interfaces.java
- koneski.java
- mainkoneski.java
- nested.java
- terimakash.java

Test Packages

Libraries

Test Libraries

Source constructordefault.java X defaultcons.java X paramConstructor.java X

1 /*
2 * To change this license header, choose License Headers in Project Properties.
3 * To change this template file, choose Tools | Templates
4 * and open the template in the editor.
5 */
6 package modul5;
7
8 /**
9 * @author LABRPL-28
10 */
11 public class paramConstructor {
12 String nama, nim;
13 int semester;
14
15 public paramConstructor(String nama, int semester, String nim){
16 this.nama = nama;
17 this.semester = semester;
18 this.nim = nim;
19 }
20
21 public void info(){
22 System.out.println("nama : " + nama + "\nNim : "
23 + nim + "\nSemester : " + semester);
24 }
25 }
26
27 }
28 }

Output

Type here to search

14:18 8:27 PM 12/30/2019

modul5 - NetBeans IDE 8.2

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

Projects X modul5

Source Packages modul5

- Modul5.java
- buku.java
- constructorAccess.java
- constructordefault.java
- defaultcons.java
- paramConstructor.java
- parambuku.java

Test Packages

Libraries

Test Libraries

ProjectakhirPBO

Source Packages <default package>

- CarForm.java
- CustomerForm.java
- Loginform.java
- Print.java
- abstraction.java
- datamobil.java

Source constructorAccess.java X constructordefault.java X defaultcons.java X paramConstructor.java X

1 /*
2 * To change this license header, choose License Headers in Project Properties.
3 * To change this template file, choose Tools | Templates
4 * and open the template in the editor.
5 */
6 package modul5;
7
8 /**
9 * @author LABRPL-28
10 */
11 public class constructorAccess {
12 public static void main(String[] args){
13 paramConstructor pc = new paramConstructor("suryo", 3, "L200180053");
14 pc.info();
15 }
16 }
17 }
18 }

Output - modul5 (run)

run:
nama : suryo
Nim : L200180053
Semester : 3
BUILD SUCCESSFUL (total time: 1 second)

Output Finished building modul5 (run).

Type here to search

14:54 8:26 PM 12/30/2019

TUGAS 5

BAB 6

1. Class BangunDatar():

2. Class Persegi();

3. Class PersegiPanjang();

The screenshot shows a Java code editor with the following code:

```
7  /**
8  *
9  * @author LABRPL-7
10 */
11 public class PersegiPanjang extends BangunDatar{
12     int panjang;
13     double lebar;
14
15     public void hitungLuas(){
16         luas = panjang*lebar;
17     }
18
19     public double hitungKeliling(){
20         keliling = 2*(panjang+lebar);
21         return keliling;
22     }
23
24     public static void main(String[] args){
25         PersegiPanjang pp = new PersegiPanjang();
26         pp.panjang = 10;
27         pp.lebar = 7;
28         pp.hitungLuas();
29         System.out.println("Luas Persegi = " + pp.luas);
30         System.out.println("Kelilingnya = " + pp.hitungKeliling());
31     }
32 }
33
```

4. Class SegiTiga();

The screenshot shows a Java code editor with the following 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-7
10 */
11 public class Segitiga extends BangunDatar{
12     double alas;
13
14     public void hitungLuas(){
15     }
16
17     public double hitungKeliling(){
18         return keliling;
19     }
20 }
```

5. Class SegiTigaSamaKaki();

```
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-7
10 */
11 public class SegitigaSamaKaki extends Segitiga{
12     double sisiMiring;
13
14     public void hitungLuas(){
15         double tinggi = sisiMiring - alas;
16         luas = (alas * tinggi)/2;
17     }
18
19     public double hitungKeliling(){
20         keliling = 2*(sisiMiring+alas);
21         return keliling;
22     }
23
24     public static void main(String[] args){
25         SegitigaSamaKaki sk = new SegitigaSamaKaki();
26         sk.sisiMiring = 20;
27         sk.alas = 8;
28         sk.hitungLuas();
29         System.out.println("Luas Segitiga Sama Kaki = " + sk.luas);
30         System.out.println("Kelilingnya = " + sk.hitungKeliling());
31     }
32 }
```

6. Class SegiTigaSamaSisi();

```
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-7
10  */
11 public class SegitigaSamaSisi extends Segitiga{
12     double sisi;
13
14     public void hitungLuas(){
15
16     }
17
18     public double hitungKeliling(){
19         keliling = 3*sisi;
20         return keliling;
21     }
22
23     public static void main(String[] args){
24         SegitigaSamaSisi s3 = new SegitigaSamaSisi();
25         s3.sisi=6;
26         s3.hitungLuas();
27
28         System.out.println("Kelilingnya = " + s3.hitungKeliling());
29     }
30 }
```

BAB 7

encapsulation - NetBeans IDE 8.2

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

Projects Services Files

Source Packages encapsulation

- karyawan.java
- karyawandemo.java
- manager.java
- newmain.java

encapsulations

Test Packages

Libraries

Test Libraries

interface

Source Packages

- <default package>
- mammal.java

Space

plginterface

Test Packages

Libraries

Test Libraries

libari

Source Packages

modul5

Source Packages

- Modul5.java
- buku.java
- constructorAccess.java
- constructorDefault.java
- defaultConst.java
- paramConstructor.java
- paramBuku.java

Output

karyawan.java X manager.java X newmain.java X

Source History

Search (Ctrl+F)

84%

12:41 15/11/2019 ENG

```
7 /**
8  * 
9  * @author LABRPL-13
10 */
11
12 public class karyawan {
13     private String nama;
14     private float gaji;
15     private int usia;
16
17     public String getName(){
18         return nama;
19     }
20     public float getGaji(){
21         return gaji;
22     }
23     public void setName(String nama){
24         this.nama = nama;
25     }
26     public void setGaji(float gaji){
27         this.gaji = gaji;
28     }
29     public int getUsia(){
30         return usia;
31     }
32     public void setUsia(int usia){
33         this.usia = usia;
34     }
35 }
36
```

Manager class

encapsulation - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

karyawan.java manager.java newmain.java

Source History

```
11
12 public class manager extends karyawan {
13     private float jamkerja = 7.5f;
14     private float gajilembur = 5000;
15     private int jamlembur = 4;
16
17
18     public int getjamlembur() {
19         return jamlembur;
20     }
21     public void setjamlembur(int jamlembur) {
22         this.jamlembur = jamlembur;
23     }
24     public float getgajilembur() {
25         return gajilembur;
26     }
27     public void setgajilembur(float gajilembur) {
28         this.gajilembur = gajilembur;
29     }
30     public float getgajimanager() {
31         return getGaji() * 2;
32     }
33     public float getnewjamkerja() {
34         return jamkerja;
35     }
36     public void setnewjamkerja(float jamkerja) {
37         this.jamkerja = jamkerja;
38     }
39     public float gethonorlembur() {
40         return gajilembur * jamlembur;
41     }

```

Output

87%

Type here to search

12:39 15/11/2019

Main class

encapsulation - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

karyawan.java manager.java newmain.java

Source History

```
11
12 public class newmain {
13     public static void main(String[] args) {
14         karyawan k1 = new karyawan();
15         karyawan k2 = new karyawan();
16         manager m1 = new manager();
17         manager m2 = new manager();
18         manager m3 = new manager();
19         k1.setName("suryo");
20         k2.setGaji(2500);
21         m1.setGaji(2500);
22         k1.setUsia(21);
23
24
25         System.out.println(k1.getName());
26         System.out.println(k2.getGaji());
27         System.out.println(k1.getUsia());
28
29         m1.setjamlembur(6);
30         m2.setnewjamkerja(8.5f);
31         m3.setgajilembur(5000);
32         System.out.println(m3.gethonorlembur());

```

Output - encapsulation (run)

```
run:
suryo
2500.0
21
20000.0
8.5
5000.0
7500.0
BUILD SUCCESSFUL (total time: 4 seconds)
```

Output

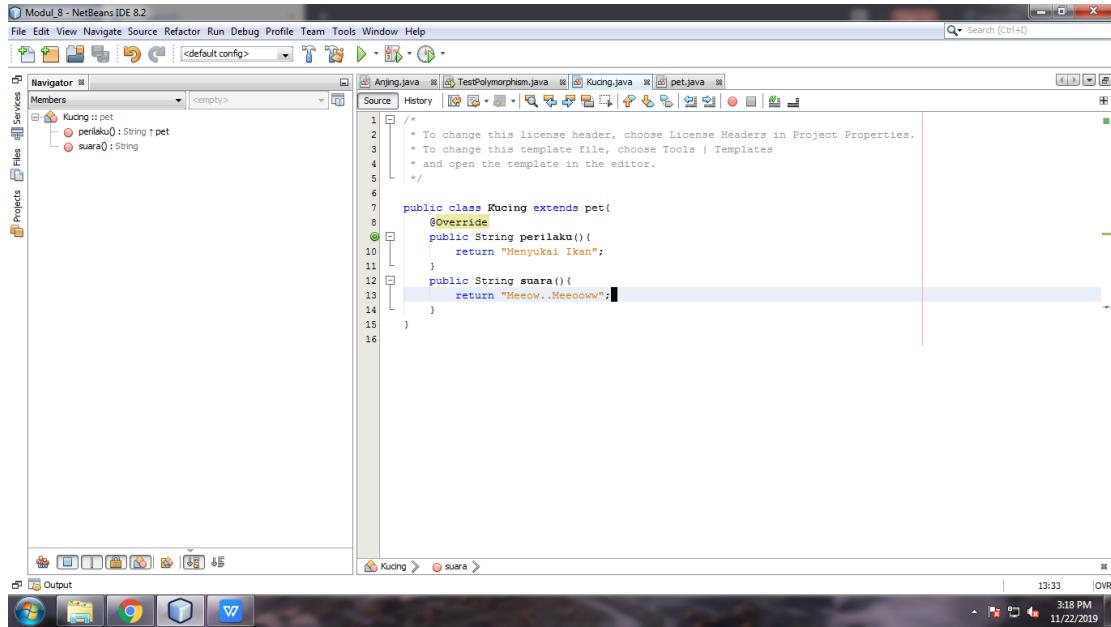
87%

Type here to search

12:34 15/11/2019

Latihan

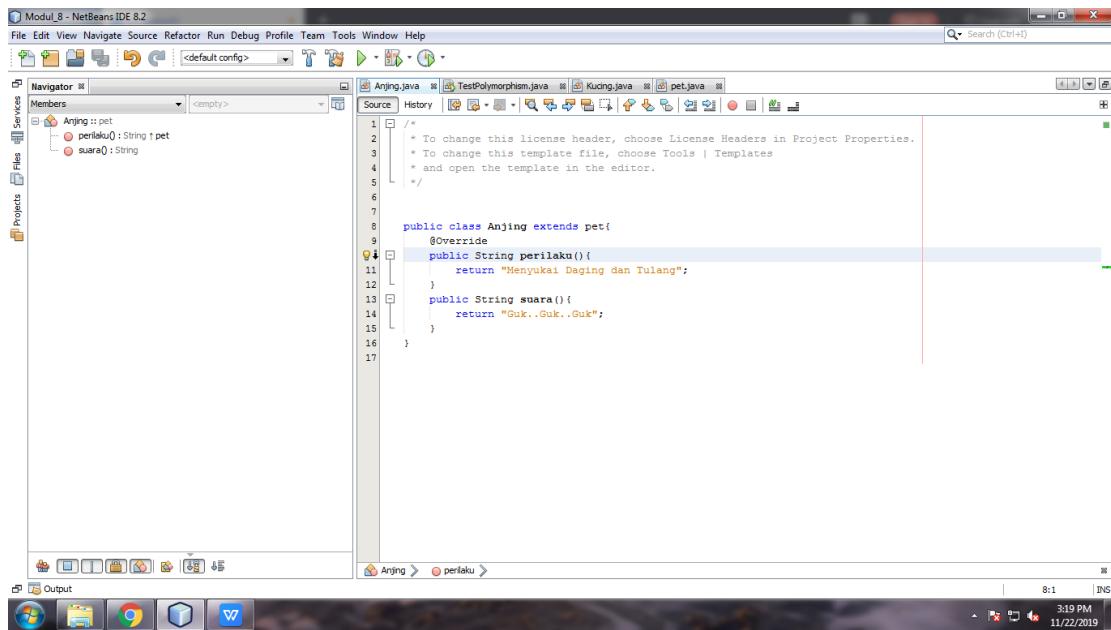
Kucing class



The screenshot shows the NetBeans IDE interface with the title bar "Modul_8 - NetBeans IDE 8.2". The main window displays the Kucing.java file under the "Source" tab. The code defines a class Kucing that extends the pet class. It contains two methods: perilaku() which returns "Menyukai Ikan", and suara() which returns "Meeow..Meecoww". The Navigator pane on the left shows the members of the Kucing class: perilaku0 and suara0.

```
/*
 * 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 Kucing extends pet{
    @Override
    public String perilaku(){
        return "Menyukai Ikan";
    }
    public String suara(){
        return "Meeow..Meecoww";
    }
}
```

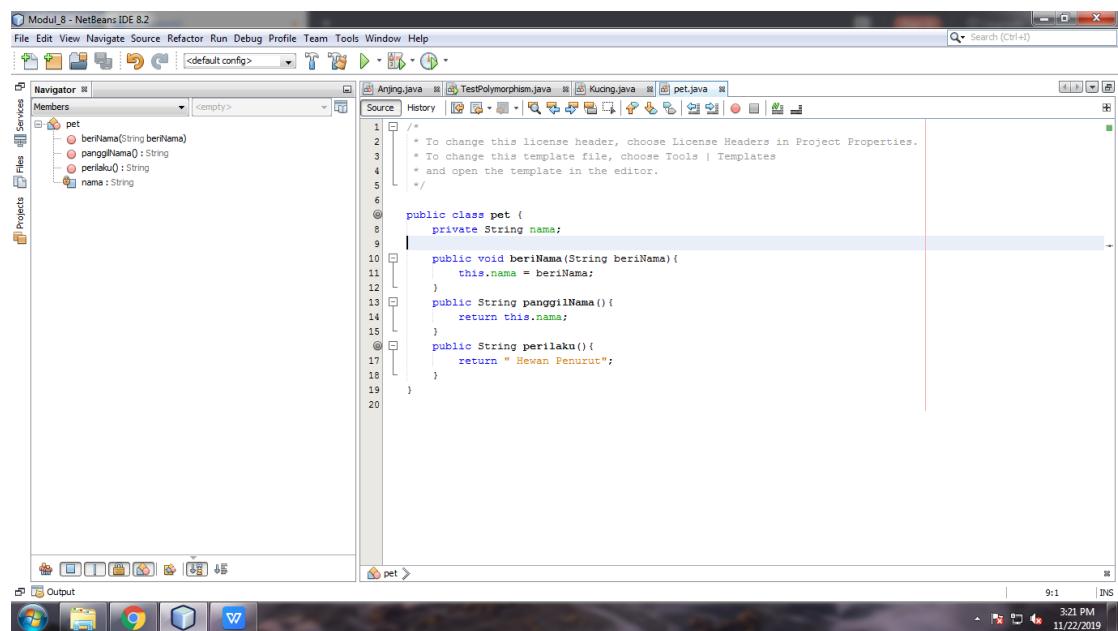
Anjing class



The screenshot shows the NetBeans IDE interface with the title bar "Modul_8 - NetBeans IDE 8.2". The main window displays the Anjing.java file under the "Source" tab. The code defines a class Anjing that extends the pet class. It contains two methods: perilaku() which returns "Menyukai Daging dan Tulang", and suara() which returns "Guk..Guk..Guk". The Navigator pane on the left shows the members of the Anjing class: perilaku0 and suara0.

```
/*
 * 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 Anjing extends pet{
    @Override
    public String perilaku(){
        return "Menyukai Daging dan Tulang";
    }
    public String suara(){
        return "Guk..Guk..Guk";
    }
}
```

Pet class



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

- Title Bar:** Modul_8 - 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.
- Navigator:** Shows the project structure with a node named "pet". Under "pet", there are three methods: beriNama(String beriNama), panggilNama(), and perilaku():String.
- Source Editor:** Displays the code for the Pet class. The code is as follows:

```
/*
 * 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 pet {
    private String nama;
    public void beriNama(String beriNama){
        this.nama = beriNama;
    }
    public String panggilNama(){
        return this.nama;
    }
    public String perilaku(){
        return " Hewan Penurut";
    }
}
```

- Output:** Shows standard Java output icons.
- Status Bar:** Displays the time as 9:11 PM and the date as 11/22/2019.

Class testpolymorphism

Modul_8 - NetBeans IDE 8.2

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

Search (Ctrl+F)

main - Navigator

Services Members <empty>

Projects TestPolymorphism main(String[] args)

Anjing.java TestPolymorphism.java Kucing.java pet.java

Source History

```
6  public class TestPolymorphism {
7      public static void main (String[] args){
8          Kucing k = new Kucing();
9          Anjing a = new Anjing();
10
11          k.beriNama("Tom");
12          a.beriNama("Bull");
13
14          System.out.println(
15              k.panggilNama()+"\n"+
16              k.perilaku()+"\n"+
17              k.suara()+"\n"+
18              a.panggilNama()+"\n"+
19              a.perilaku()+"\n"+
20              a.suara()
21      );
22  }
```

Output - Modul_8 (run)

```
run:
Tom
Menyukai Ikan
Meow..Meowow
Bull
Menyukai Daging dan Tulang
Guk..Guk..Guk
BUILD SUCCESSFUL (total time: 0 seconds)
```

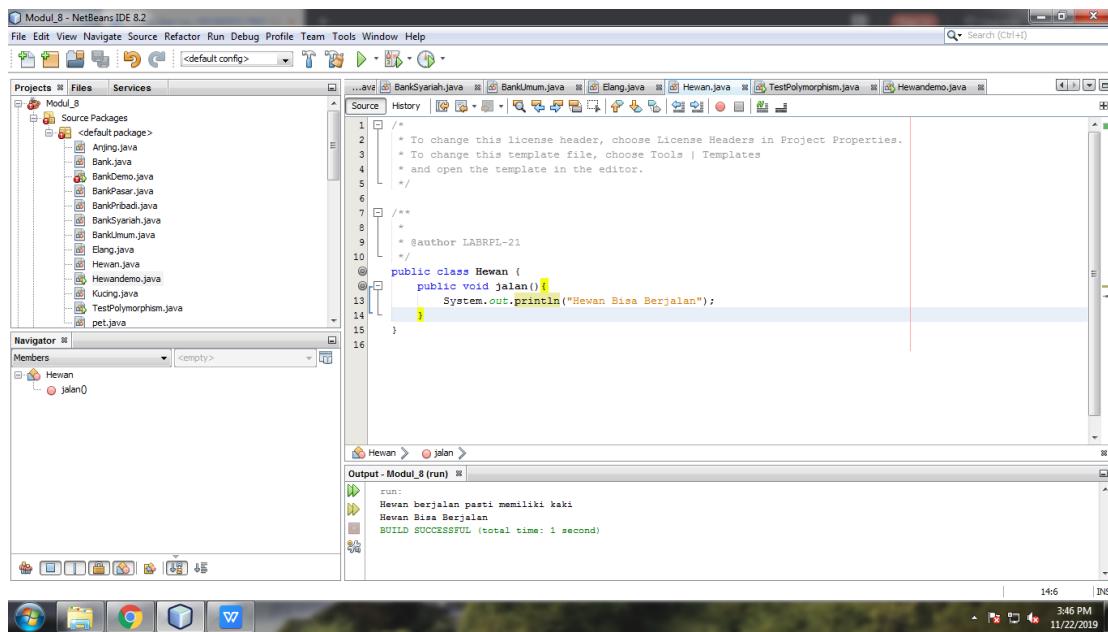
Output

18:24 3:18 PM 11/22/2019

Tugas :

Nomer 1

Hewan class



```
Modul_8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
...avt BankSyariah.java BankUmmum.java Elang.java Hewan.java TestPolymorphism.java Hewandemo.java
Projects Files Services
Modul_8
Source Packages
<default package>
Anjing.java
Bank.java
BankDemo.java
BankPasar.java
BankPrabadi.java
BankSyariah.java
BankUmmum.java
Elang.java
Hewan.java
Hewandemo.java
Kucing.java
TestPolymorphism.java
pet.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
7 /**
8  * @author LABRPL-21
9  */
10 public class Hewan {
11     public void jalan() {
12         System.out.println("Hewan Bisa Berjalan");
13     }
14 }
15
16
Hewan > jalan >
Output: Modul_8 (run) *
run:
Hewan berjalan pasti memiliki kaki
Hewan Bisa Berjalan
BUILD SUCCESSFUL (total time: 1 second)
146 3:46 PM 11/22/2019
```

Elang

Modul_8 - NetBeans IDE 8.2

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

Projects Files Services

Source Packages <default package>

- Anjing.java
- Bank.java
- BankDemo.java
- BankPasar.java
- BankPrabodi.java
- BankSyariah.java
- BankUmum.java
- Elang.java
- Hewan.java
- Hewandemo.java
- Kucing.java
- TestPolymorphism.java
- pet.java

Navigator Members

Elang :: Hewan
Elang.jaln()

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
7 /**
8  *
9  * @author LABRPL-21
10 */
11 public class Elang extends Hewan {
12     public void jaln() {
13         System.out.println("Hewan berjalan pasti memiliki kaki");
14     }
15 }
16

```

Elang > jaln >

Output - Modul_8 (run) *

```

run:
Hewan berjalan pasti memiliki kaki
Hewan Bisa Berjalan
BUILD SUCCESSFUL (total time: 1 second)

```

13:50 3:45 PM 11/22/2019

Hewan Demo

Modul_8 - NetBeans IDE 8.2

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

Projects Files Services

Source Packages <default package>

- Anjing.java
- Bank.java
- BankDemo.java
- BankPasar.java
- BankPrabodi.java
- BankSyariah.java
- BankUmum.java
- Elang.java
- Hewan.java
- Hewandemo.java
- Kucing.java
- TestPolymorphism.java
- pet.java

Navigator Members

Hewandemo
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
7 /**
8  *
9  * @author LABRPL-21
10 */
11 public class Hewandemo {
12     public static void main (String[] args){
13         Hewan k = new Hewan();
14         Elang a = new Elang();
15
16         a.jaln();
17         k.jaln();
18     }
19 }
20

```

Hewandemo > main >

Output - Modul_8 (run) *

```

run:
Hewan berjalan pasti memiliki kaki
Hewan Bisa Berjalan
BUILD SUCCESSFUL (total time: 1 second)

```

17:15 3:46 PM 11/22/2019

NOMER 2

Modul_8 - NetBeans IDE 8.2

```

public class CustomerData {
    * @author LABRPL-26
    private String nama;
    private String alamat;
    private String Tanggallahir;
    private String pekerjaan;
    private int gaji;

    public String getName() {
        return nama;
    }

    public void setName(String nama) {
        this.nama = nama;
    }

    public String getAlamat() {
        return alamat;
    }

    public void setAlamat(String alamat) {
        this.alamat = alamat;
    }

    public String getTanggallahir() {
        return Tanggallahir;
    }
}

```

Output

Type here to search

11:26/1:12 8:56 PM 11/25/2019

NOMER 3

Modul_8 - NetBeans IDE 8.2

```

CustomerData ml = new CustomerData();
ml.setNama("Ari");
ml.setGaji(4000000);
ml.setAlamat("Purwodadi");
ml.setTanggalLahir("05 Februari 1999");
ml.setPekerjaan("Programer");
System.out.println("Nama : " + ml.getNama());
System.out.println("Alamat : " + ml.getAlamat());
System.out.println("Tanggal Lahir : " + ml.getTanggalLahir());
System.out.println("Pekerjaan : " + ml.getPekerjaan());
System.out.println("Gaji : " + ml.getGaji());

System.out.println("\n");

CustomerData m2 = new CustomerData();
m2.setNama("Wibowo");
m2.setGaji(3500000);
m2.setAlamat("Grobogan");

```

Output - Modul_8 (run)

Nama : Ari
Alamat : Purwodadi
Tanggal Lahir : 05 Februari 1999
Pekerjaan : Programmer
Gaji : 4000000

Nama : Wibowo
Alamat : Grobogan
Tanggal Lahir : 06 Februari 1999
Pekerjaan : Programmer
Gaji : 3500000

BUILD SUCCESSFUL (total time: 0 seconds)

Output Finished building Modul_8 (run).

Type here to search

17:31 8:56 PM 11/25/2019

Nomer 4

Bank class (superclass)

The screenshot shows the NetBeans IDE interface with the title bar "Modul_8 - NetBeans IDE 8.2". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has icons for New Project, Open Project, Save, Undo, Redo, Cut, Copy, Paste, Find, Replace, and others. The Navigator pane shows a project named "Bank" with a file "rasioBunga() : int". The Source editor pane 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 Asus
10 */
11 public class Bank {
12     protected int rasioBunga(){
13         return 5;
14     }
15 }
```

Bank Pribadi class

The screenshot shows the NetBeans IDE interface with the title bar "Modul_8 - NetBeans IDE 8.2". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has icons for New Project, Open Project, Save, Undo, Redo, Cut, Copy, Paste, Find, Replace, and others. The Navigator pane shows a project named "Bank" with a file "rasioBunga() : int t Bank". The Source editor pane 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 Asus
10 */
11 public class BankPribadi extends Bank {
12     protected int rasioBunga(){
13         return 7;
14     }
15 }
```

Bank umum

The screenshot shows the NetBeans IDE interface with the title bar "Modul_8 - NetBeans IDE 8.2". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has icons for New Project, Open Project, Save, Undo, Redo, Cut, Copy, Paste, Find, Replace, Run, Stop, and Exit. The Projects tab shows a project named "Modul_8" with source packages like "Anjing.java", "Bank.java", "BankDemo.java", "BankPasar.java", "BankPribadi.java", "BankSyariah.java", "BankUmum.java", "Kucing.java", "TestPolymorphism.java", and "pet.java". The Files tab shows files like "Bank.java", "BankDemo.java", "BankPasar.java", "BankPribadi.java", "BankSyariah.java", "BankUmum.java", and "pet.java". The Services tab is empty. The Source editor displays the code for the "BankUmum" class, which extends the "Bank" class and overrides the "ratioBunga()" method to return 9. The Navigator pane shows members of the "Bank" class, specifically "ratioBunga() int". The Output window shows the run results: "Bank Pribadi :7", "Bank Umum :9", "Bank Pazar :3", "Bank Syariah :0", "Bank Pazar :3", and "Bank Syariah :0". The status bar at the bottom right shows the time as 3:25 PM and the date as 11/22/2019.

```
2 * To change this license header, choose License Headers in Project Properties.
3 * To change this template file, choose Tools | Templates
4 * and open the template in the editor.
5
6 /**
7  * 
8  * @author Asus
9 */
10 public class BankUmum extends Bank{
11     protected int ratioBunga(){
12         return 9;
13     }
14 }
15
16
```

Bank Pazar class

The screenshot shows the NetBeans IDE interface with the title bar "Modul_8 - NetBeans IDE 8.2". The menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, Help. The toolbar has icons for New Project, Open Project, Save, Undo, Redo, Cut, Copy, Paste, Find, Replace, Run, Stop, and Exit. The Projects tab shows a project named "Modul_8" with source packages like "Anjing.java", "Bank.java", "BankDemo.java", "BankPasar.java", "BankPribadi.java", "BankSyariah.java", "BankUmum.java", and "pet.java". The Files tab shows files like "Bank.java", "BankDemo.java", "BankPasar.java", "BankPribadi.java", "BankSyariah.java", "BankUmum.java", and "pet.java". The Services tab is empty. The Source editor displays the code for the "BankPasar" class, which extends the "BankUmum" class and overrides the "ratioBunga()" method to return 3. The Navigator pane shows members of the "BankUmum" class, specifically "ratioBunga() int". The Output window shows the run results: "Bank Pribadi :7", "Bank Umum :9", "Bank Pazar :3", "Bank Syariah :0", "Bank Pazar :3", and "Bank Syariah :0". The status bar at the bottom right shows the time as 3:25 PM and the date as 11/22/2019.

```
1 /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6 /**
7  * 
8  * @author Asus
9 */
10 public class BankPasar extends BankUmum {
11     protected int ratioBunga(){
12         return 3;
13     }
14 }
15
```

Bank Syariah Class

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

- Title Bar:** Modul_8 - 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 New Project, Open Project, Save, Undo, Redo, Cut, Copy, Paste, Find, Replace, and others.
- Projects Tab:** Shows the 'Modul_8' project structure with Source Packages, Test Packages, and Libraries.
- Source Editor:** Displays the 'BankSyariah.java' file content:

```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6
7  /**
8  * 
9  * @author Asus
10 */
11 public class BankSyariah extends BankUmum{
12     protected int ratioBunga(){
13         return 0;
14     }
15 }
```
- Output Tab:** Shows the output of the run command:

```
run:
Bank Pribadi :7
Bank Umum :9
Bank Pasar :3
Bank Syariah :0
Bank Pasar :3
Bank Syariah :0
```
- Taskbar:** Shows icons for Windows Start, File Explorer, Google Chrome, FileZilla, and Visual Studio Code.

Bank Demo class (main class)

Modul_8 - NetBeans IDE 8.2

```

10  /*
11   * <default package>
12   * 
13   * Public class BankDemo {
14   *     public static void main(String[] args) {
15   *         Bank bpr = new BankPribadi();
16   *         Bank bu = new BankUmum();
17   *         Bank bp = new BankPasar();
18   *         Bank bs = new BankSyariah();
19   *
20   *         System.out.println(
21   *             "Bank Pribadi :" + bpr.rasioBunga() +"\n"+
22   *             "Bank Umum :" + bu.rasioBunga() +"\n"+
23   *             "Bank Pasar :" + bp.rasioBunga() +"\n"+
24   *             "Bank Syariah :" + bs.rasioBunga()
25   *         );
26   *         BankUmum bkper = new BankPasar();
27   *         BankUmum bksyr = new BankSyariah();
28   *
29   *         System.out.println(
30   *             "Bank Pasar :" + bkper.rasioBunga() +"\n"+
31   *             "Bank Syariah :" + bksyr.rasioBunga()
32   *         );
33   *     }
34   * }

```

Output - Modul_8 (run) :

```

run:
Bank Pribadi :7
Bank Umum :9
Bank Pasar :3
Bank Syariah :0
Bank Pasar :3
Bank Syariah :0

```

BAB 9

abstraction

Modul9 - NetBeans IDE 8.2

```

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

```

Modul9 - NetBeans IDE 8.2

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

Start Page AbstrakClass.java ObjekAbstrakClass.java TurunanAbstrakClass.java ObjekAbstrakClasses.java methodAbstract.java Persegi.java Me...

Projects Services Files

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  
7 /**  
8  *  
9  * @author Personal  
10 */  
11 public class ObjekAbstrakClass {  
12     public static void main(String[] args){  
13         AbstrakClass ac = new AbstrakClass(2,3,4);  
14     }  
15 }  
16
```

Output

8:4 29/11/2019

Modul9 - NetBeans IDE 8.2

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

Start Page AbstrakClass.java ObjekAbstrakClass.java TurunanAbstrakClass.java ObjekAbstrakClasses.java methodAbstract.java Persegi.java Me...

Projects Services Files

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  
7 /**  
8  *  
9  * @author Personal  
10 */  
11 public class TurunanAbstrakClass extends AbstrakClass{  
12     int x;  
13  
14     public TurunanAbstrakClass (int a, int b, int c){  
15         super(a,b,c);  
16         x = a+b+c;  
17     }  
18  
19     public void printX(){  
20         System.out.println(x);  
21     }  
22 }
```

Output

8:4 29/11/2019

Modul9 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

Lampu.java Mamala.java NamaInterface.java

Test Packages Libraries Test Libraries

Modul9

Source Packages <default package>

- AbstrakClass.java
- Balok.java
- Bola.java
- JajarGanjang.java
- Kerucut.java
- Kubus.java
- Lingkaran.java
- Main.java
- MethodMain.java
- ObjekAbstrakClass.java
- ObjekAbstrakClasss.java
- Persegi.java
- PersegiPanjang.java
- PrismaSegitiga.java
- Segitiga.java
- TurunanAbstrakClass.java
- methodAbstract.java
- methodAbstrak.java

modul9

Output

```
/*
 * 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 Personal
 */
public class ObjekAbstrakClasss {
    public static void main(String[] args){
        TurunanAbstrakClass tac = new TurunanAbstrakClass(2,3,2);
        tac.printX();
        System.out.println(tac.kali());
    }
}
```

8:4 INS

8:02 ENG 29/11/2019

Method abstraction

Modul9 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

Start Page AbstrakClass.java ObjekAbstrakClass.java TurunanAbstrakClass.java ObjekAbstrakClass.java methodAbstract.java Persegi.java Me...

Source History

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

Output

8:04 ENG 29/11/2019

Modul9 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

Start Page AbstrakClass.java ObjekAbstrakClass.java TurunanAbstrakClass.java ObjekAbstrakClass.java methodAbstract.java Persegi.java Me...

Source History

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

Output

8:04 ENG 29/11/2019

Modul9 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

...ave ObjekAbstrakClass.java TurunanAbstrakClass.java ObjekAbstrakClasses.java methodAbstract.java Persegi.java MethodMain.java PersegiPanjang.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
7 /**
8  *
9  * @author Personal
10 */
11 public class MethodMain {
12     public static void main(String[] args){
13         Persegi psg = new Persegi();
14         System.out.println("Keliling Persegi = " + psg.getKell());
15         System.out.println("Luas Persegi = " + psg.getLuas());
16     }
17 }
18
19
20 }
```

Output

17:09 8:06 ENG 29/11/2019

Latihan

Modul9 - NetBeans IDE 8.2

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

...Java ObjekAbstrakClasss.java methodAbstract.java Persegi.java MethodMain.java PersegPanjang.java JajarGenjang.java Lingkaran.java...

Projects Services Files

Lampu.java Mamala.java NamaInterface.java

Test Packages Libraries Test Libraries

Modul9

Source Packages <default package>

- AbstrakClass.java
- Balok.java
- Bola.java
- JajarGenjang.java
- Kerucut.java
- Kubus.java
- Lingkaran.java
- Main.java
- MethodMain.java
- ObjekAbstrakClass.java
- ObjekAbstrakClasss.java
- Persegi.java
- PersegPanjang.java
- PrismaSegitiga.java
- Segitiga.java
- TurunanAbstrakClass.java
- methodAbstract.java
- methodAbstrak.java

modul9

Test Packages Libraries Test Libraries

polymorphism Polymorphismmmmm

Output

Search (Ctrl+F)

Source History

/* 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.

```
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 Personal
10 */
11 public class PersegPanjang extends methodAbstract {
12     int panjang = 3;
13     int lebar = 5;
14
15     @Override
16     public int luas() {
17         return panjang*lebar;
18     }
19
20     @Override
21     public int keliling(){
22         return 2*(panjang+lebar);
23     }
24 }
25
```

8:4 INS

8:08 ENG 29/11/2019

Modul9 - NetBeans IDE 8.2

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

...Java ObjekAbstrakClasss.java methodAbstract.java Persegi.java MethodMain.java PersegPanjang.java JajarGenjang.java Lingkaran.java...

Projects Services Files

Lampu.java Mamala.java NamaInterface.java

Test Packages Libraries Test Libraries

Modul9

Source Packages <default package>

- AbstrakClass.java
- Balok.java
- Bola.java
- JajarGenjang.java
- Kerucut.java
- Kubus.java
- Lingkaran.java
- Main.java
- MethodMain.java
- ObjekAbstrakClass.java
- ObjekAbstrakClasss.java
- Persegi.java
- PersegPanjang.java
- PrismaSegitiga.java
- Segitiga.java
- TurunanAbstrakClass.java
- methodAbstract.java
- methodAbstrak.java

modul9

Test Packages Libraries Test Libraries

polymorphism Polymorphismmmmm

Output

Search (Ctrl+F)

Source History

/* 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.

```
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 Personal
10 */
11 public class JajarGenjang extends methodAbstract {
12     int panjang = 12;
13     int lebar = 15;
14     int alas = 4;
15     int tinggi = 3;
16
17     @Override
18     public int luas() {
19         return alas*tinggi;
20     }
21     @Override
22     public int keliling(){
23         return 2*(panjang+lebar);
24     }
25 }
```

8:4 INS

8:08 ENG 29/11/2019

Modul9 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

...ave methodAbstract.java Persegi.java MethodMain.java Persegipanjang.java JajarGenjang.java Lingkaran.java Segitiga.java methodAbst...

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
7  /**
8   *
9   * @author Personal
10  */
11 public class Lingkaran extends methodAbstract {
12     int jari = 14;
13
14     @Override
15     public int luas() {
16         return 22/7*jari*jari;
17     }
18     @Override
19     public int keliling() {
20         return 22/7*2*jari;
21     }
22 }
23
```

Output

8:09 ENG 29/11/2019

Modul9 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

...ave methodAbstract.java Persegi.java MethodMain.java Persegipanjang.java JajarGenjang.java Lingkaran.java Segitiga.java methodAbst...

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
7  /**
8   *
9   * @author Personal
10  */
11 public class Segitiga extends methodAbstract {
12     int alas = 5;
13     int tinggi = 2;
14
15     public int luas() {
16         return alas*tinggi/2;
17     }
18     public int keliling() {
19         return 3*alas;
20     }
21 }
22
```

Output

8:09 ENG 29/11/2019

Modul9 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files ...ave methodAbstract.java Persegi.java MethodMain.java Persegipanjang.java JajarGenjang.java Lingkaran.java Segitiga.java methodAbst...

Source History ...ave methodAbstract.java Persegi.java MethodMain.java Persegipanjang.java JajarGenjang.java Lingkaran.java Segitiga.java methodAbst...

MethodMain.java

```
10
11     public class MethodMain {
12         public static void main(String[] args) {
13             Persegi psg = new Persegi();
14             System.out.println("Keliling Persegi = " + psg.getKell());
15             System.out.println("Luas Persegi = " + psg.getLuas());
16
17             PersegiPanjang pp = new PersegiPanjang();
18             System.out.println("\nKeliling Persegi Panjang = " + pp.getKell());
19             System.out.println("Luas Persegi Panjang = " + pp.getLuas());
20
21             JajarGenjang jg = new JajarGenjang();
22             System.out.println("\nKeliling Jajar Genjang = " + jg.getKell());
23             System.out.println("Luas Jajar Genjang = " + jg.getLuas());
24
25             Lingkaran lg = new Lingkaran();
26             System.out.println("\nKeliling Lingkaran = " + lg.getKell());
```

Output - Modul9 (run)

```
run:
Keliling Persegi = 20
Luas Persegi = 25

Keliling Persegi Panjang = 16
Luas Persegi Panjang = 15

Keliling Jajar Genjang = 54
Luas Jajar Genjang = 12

Keliling Lingkaran = 64
Luas Lingkaran = 508

Keliling Segitiga = 15
Luas Segitiga = 5
BUILD SUCCESSFUL (total time: 0 seconds)
```

Output

11:26 8:11 ENG 29/11/2019

Tugas

Modul9 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

...java MethodMain.java Persegipanjang.java JajarGenjang.java Lingkaran.java Segitiga.java methodAbstrak.java Balok.java Kubus.java...

Source History

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

1:1 8:12 ENG 29/11/2019

Modul9 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

...java MethodMain.java Persegipanjang.java JajarGenjang.java Lingkaran.java Segitiga.java methodAbstrak.java Balok.java Kubus.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
7 /**
8  * 
9  * @author Personal
10 */
11 public class Balok extends methodAbstrak {
12     int panjang =24;
13     int lebar = 25;
14     int tinggi = 7;
15
16     @Override
17     public int luasPermukaan(){
18         return 2*(panjang*lebar+panjang*tinggi+lebar*tinggi);
19     }
20
21     public int volume(){
22         return panjang*lebar*tinggi;
23     }
24 }
```

8:4 8:13 ENG 29/11/2019

Modul9 - NetBeans IDE 8.2

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

Search (Ctrl+I)

Projects Services Files

...ave PersegiPanjang.java JajarGenjang.java Lingkaran.java Segitiga.java methodAbstrak.java Balok.java Kubus.java K..

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
7 /**
8 *
9 * @author Personal
*/
10
11 public class Kubus extends methodAbstrak{
12 int sisi = 6;
13
14 public int luasPermukaan(){
15 return 6*sisi;
16 }
17 public int volume(){
18 return sisi*sisi*sisi;
19 }
20 }
21

Modul9

Source Packages

<default package>

- AbstrakClass.java
- Balok.java
- Bola.java
- JajarGenjang.java
- Kerucut.java
- Kubus.java
- Lingkaran.java
- Man.java
- MethodMain.java
- ObjekAbstrakClass.java
- ObjekAbstrakClass.java
- Perseri.java
- PerseriPanjang.java
- PrismaSegitiga.java
- Segitiga.java
- TurunanAbstrakClass.java
- methodAbstract.java
- methodAbstrak.java

modul9

Test Packages

Libraries

Test Libraries

polymorphism

Polymorphismmmmm

8:4 8:14 ENG 29/11/2019

Modul9 - NetBeans IDE 8.2

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

Search (Ctrl+I)

Projects X Services Files **Bola.java**

...java PersegiPanjang.java JajarGenjjang.java Lingkaran.java Segitiga.java methodAbstrak.java Balok.java Kubus.java K...
Lampu.java Mamalia.java NamaInterface.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
7 /**
8 *
9 * @author Personal
10 */
11 public class Bola extends methodAbstrak {
12     int jari = 14;
13
14     public int lmasPermukaan() {
15         return (22/7)*4*jari*jari;
16     }
17     public int volume() {
18         return (22/7)*(4/3)*jari*jari*jari;
19     }
20 }
21
```

Source Packages

<default package>

- AbstrakClass.java
- Balok.java
- Bola.java
- JajarGenjjang.java
- Kerucut.java
- Kubus.java
- Lingkaran.java
- Man.java
- MethodMain.java
- ObjekAbstrakClass.java
- ObjekAbstrakClasss.java
- Persegi.java
- PersegiPanjang.java
- PrismaSegitiga.java
- Segitiga.java
- TurunanAbstrakClass.java
- methodAbstrak.java
- methodAbstrak.java

modul9

Test Packages Libraries Test Libraries polymorphism Polymorphismmmmm

8:4 ENG 29/11/2019

Modul9 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

...ave Lingaran.java Segitiga.java methodAbstrak.java Balok.java Kubus.java Bola.java Kerucut.java PrismaSegitiga.java Main.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
7  /**
8   * 
9   * @author Personal
10  */
11 public class Kerucut extends methodAbstrak {
12     int jari = 7;
13     int sisi = 3;
14     int tinggi = 4;
15
16     public int luasPermukaan(){
17         return 22/7*jari*(jari+sisi);
18     }
19     public int volume(){
20         return (int) (0.3*3.14*jari*jari*tinggi);
21     }
22 }
23
```

modul9

8:4 29/11/2019

Modul9 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

...ave Lingaran.java Segitiga.java methodAbstrak.java Balok.java Kubus.java Bola.java Kerucut.java PrismaSegitiga.java Main.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
7  /**
8   * 
9   * @author Personal
10  */
11 public class PrismaSegitiga extends methodAbstrak {
12     int alas = 6;
13     int tAlas = 6;
14     int tPrisma = 10;
15
16     public int luasPermukaan(){
17         return(alas*tAlas)+3*alas*tPrisma;
18     }
19     public int volume(){
20         return 1/3*alas*tAlas*tPrisma;
21     }
22 }
23
```

modul9

8:4 29/11/2019

The screenshot shows the NetBeans IDE 8.2 interface. The top menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, Window, and Help. A search bar at the top right contains the placeholder "Search (Ctrl+F)". The left sidebar displays the project structure under "Modul9". The main workspace shows the source code for the "Main" class, which creates instances of Balok, Kubus, Bola, and Kerucut and prints their surface areas and volumes. The output window at the bottom shows the console output with the calculated values.

```
Luas Permukaan Balok = 1886
Volume Balok = 4200

Luas Permukaan Kubus = 36
Volume Kubus = 216

Luas Permukaan Bola = 2352
Volume Bola = 8232

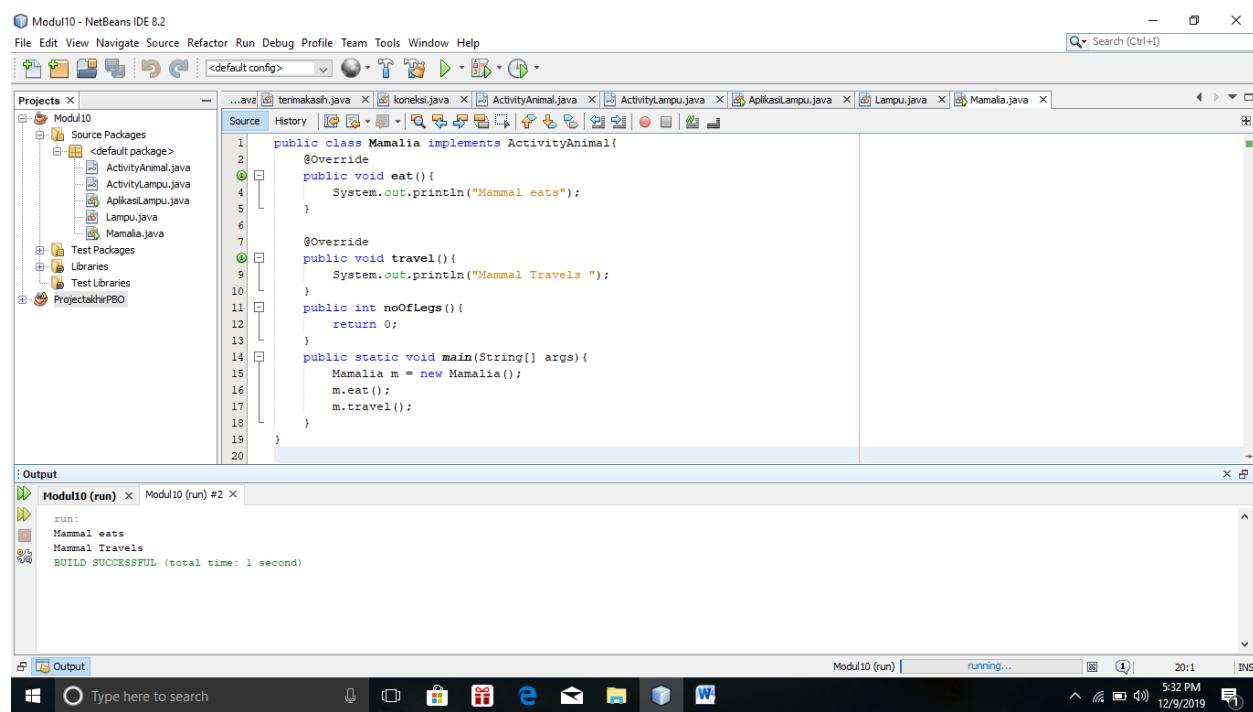
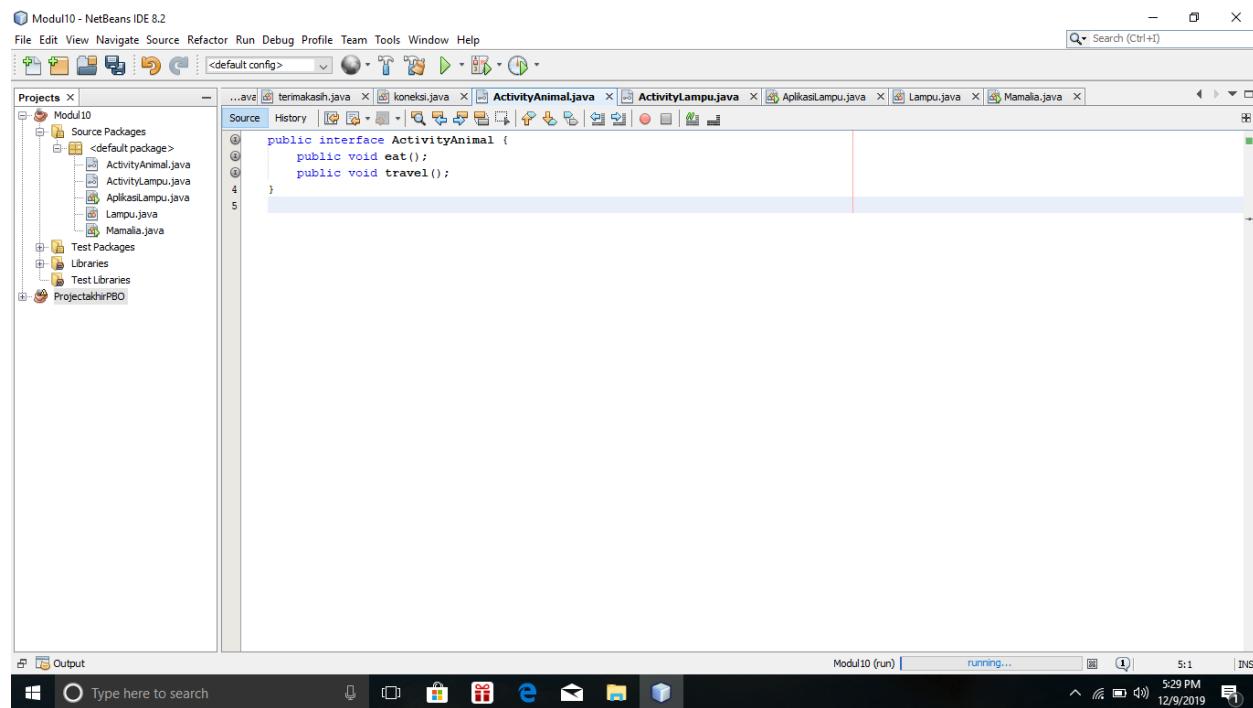
Luas Permukaan Kerucut = 216
Volume Kerucut = 184

Luas Permukaan PrismaSegitiga = 216
Volume PrismaSegitiga = 0
BUILD SUCCESSFUL (total time: 0 seconds)
```

BAB 10

Modul 10

Laporan dan Tugas



Modul10 - NetBeans IDE 8.2

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

Source History Search (Ctrl+I)

Projects X Modul10

- Source Packages
 - <default package>
 - ActivityAnimal.java
 - ActivityLampu.java
 - ApikasiLampu.java
 - Lampu.java
 - Mamala.java
 - Test Packages
 - Libraries
 - Test Libraries
- ProjectakhirPBO

Source ...java mainkoneksi.java terimakash.java koneksi.java ActivityAnimal.java ActivityLampu.java ApikasiLampu.java Lampu.java Mamala.java

```
public interface ActivityLampu {
    public static final int LAMPU_HIDUP=1;
    public static final int LAMPU_MATI=0;
    public static final int LAMPU_REDUP=2;
    public abstract void matikanLampu();
    public abstract void hidupkanLampu();
    public abstract void redupkanLampu();
}
```

Output Type here to search 5:33 PM 12/9/2019

Modul10 (run) running... 9:1 INS

Modul10 - NetBeans IDE 8.2

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

Source History Search (Ctrl+I)

Projects X Modul10

- Source Packages
 - <default package>
 - ActivityAnimal.java
 - ActivityLampu.java
 - ApikasiLampu.java
 - Lampu.java
 - Mamala.java
 - Test Packages
 - Libraries
 - Test Libraries
- ProjectakhirPBO

Source ...java mainkoneksi.java terimakash.java koneksi.java ActivityAnimal.java ActivityLampu.java ApikasiLampu.java Lampu.java Mamala.java

```
public class Lampu implements ActivityLampu{
    public int statusLampu;

    @Override
    public void matikanLampu(){
        if(statusLampu == 0){
            System.out.println("Lampu sudah dalam kondisi mati");
        }else if(statusLampu == 1){
            statusLampu -= 1;
            System.out.println("Lampu sudah dimatikan");
        }
    }

    @Override
    public void hidupkanLampu(){
        if(statusLampu == 1){
            System.out.println("Lampu sudah dinyalakan\n***");
        }else{
            statusLampu += 1;
            System.out.println("Lampu sudah dalam kondisi menyala");
        }
    }

    public int setSaklar(int saklar){
        return statusLampu = saklar;
    }

    @Override
    public void redupkanLampu(){
        if(statusLampu == 2){
            System.out.println("Lampu telah diredupkan");
        }else{
    }
```

Output Type here to search 5:34 PM 12/9/2019

Modul10 (run) running... 1:1 INS

Modul10 - NetBeans IDE 8.2

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

Projects X Modul10

Source Packages <default package>

- ActivityAnimal.java
- ActivityLampu.java
- AplikasiLampu.java
- Lampu.java
- Mamala.java

Test Packages Libraries Test Libraries ProjectakhirPBO

Source History <default config> AplikasiLampu.java

```
8     }else if(statusLampu == 1){
9         statusLampu -= 1;
10        System.out.println("Lampu sudah dimatikan");
11    }
12
13
14    @Override
15    public void hidupkanLampu(){
16        if(statusLampu == 1){
17            System.out.println("Lampu sudah dinyalakan\n***");
18        }else{
19            statusLampu += 1;
20            System.out.println("Lampu sudah dalam kondisi menyala");
21        }
22
23
24    public int setSaklar(int saklar){
25        return statusLampu = saklar;
26    }
27
28    @Override
29    public void redupkanLampu(){
30        if(statusLampu == 2){
31            System.out.println("Lampu telah diredukan");
32        }else{
33            statusLampu +=1;
34            System.out.println("Keredupan Lampu telah ditambah");
35        }
36    }
37
38 }
39
```

Output Type here to search 5:35 PM 12/9/2019

Modul10 - NetBeans IDE 8.2

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

Projects X Modul10

Source Packages <default package>

- ActivityAnimal.java
- ActivityLampu.java
- AplikasiLampu.java
- Lampu.java
- Mamala.java

Test Packages Libraries Test Libraries ProjectakhirPBO

Source History <default config> AplikasiLampu.java

```
1 import java.util.Scanner;
2 public class AplikasiLampu {
3     public static void main(String[] args){
4         Lampu lampu = new Lampu();
5         Scanner sc = new Scanner(System.in);
6         lampu.statusLampu = lampu.setSaklar(0);
7         System.out.println("Status Lampu = " + lampu.statusLampu +"\n Ketikkan");
8         System.out.println("1 Untuk menyalaikan Lampu\n0 Untuk mematikan Lampu\n2 Untuk meredupkan Lampu");
9
10        if(lampu.setSaklar(sc.nextInt()) == 0){
11            lampu.matiLampu();
12        }else if(lampu.statusLampu == 1){
13            lampu.hidupkanLampu();
14        }else{
15            lampu.redupkanLampu();
16        }
17    }
18
19 }
20
```

Output Modul10 (run) X Modul10 (run) #2 X

```
run:
Status Lampu = 0
Ketikkan
1 Untuk menyalaikan Lampu
0 Untuk mematikan Lampu
2 Untuk meredupkan Lampu
```

Output Type here to search 5:36 PM 12/9/2019

BAB 11

Modul 11 - NetBeans IDE 8.2

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

default config Outer.java OuterDemo.java OuterDemo2.java OuterDemoMain.java Outer_Demo.java suryonested.java suryodemo.java

Projects X Source History ▾

Outer.java OuterDemo.java OuterDemo2.java OuterDemoMain.java Outer_Demo.java suryonested.java suryodemo.java

1 /*
2 * To change this license header, choose License Headers in Project Properties.
3 * To change this template file, choose Tools | Templates
4 * and open the template in the editor.
5 */
6
7 /**
8 *
9 * @author Asus
10 */
11 public class suryodemo {
12 public static void main(String[] args){
13 suryonested sur = new suryonested();
14 suryonested.innerclass in = sur.new innerclass()
15
16 in.jurus();
17 sur.printsuryo();
18 }
19 }
20 }

Output - Modul 11 (run)
run:
Jurus : informatika
Suryo Pramuda Wicaksono : L200180053
BUILD SUCCESSFUL (total time: 3 seconds)

Output Type here to search 17:26 10:42 AM 12/23/2019

Modul 11 - NetBeans IDE 8.2

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

default config Outer.java OuterDemo.java OuterDemo2.java OuterDemoMain.java Outer_Demo.java suryonested.java suryodemo.java

Projects X Source History ▾

Outer.java OuterDemo.java OuterDemo2.java OuterDemoMain.java Outer_Demo.java suryonested.java suryodemo.java

13 String NIM = "L200180053";
14
15 public void printsuryo(){
16 System.out.println(nama + " : " + NIM);
17 }
18
19 static class newsuryoclass{
20 static String jurusan = "informatika";
21 public void methodenama(){
22 suryonested nested = new suryonested();
23 nested.printsuryo();
24 }
25 }
26 class innerclass{
27 public void jurusan(){
28 suryonested.newsuryoclass nested = new suryonested.newsuryoclass();
29 System.out.println("Jurusan : " + nested.jurusan);
30 }
31 }
32 }

Output Type here to search 29:51 10:48 AM 12/23/2019

Modul 11 - NetBeans IDE 8.2

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

Projects X Outer.java OuterDemo.java OuterDemo2.java OuterDemoMain.java Outer_Demo.java suryonested.java suryodemo.java

Source History

```
1 /* To change this license header, choose License Headers in Project Properties.
2 * To change this template file, choose Tools | Templates
3 * and open the template in the editor.
4 */
5
6 /**
7 *
8 * @author LABRPL-29
9 */
10 public class OuterDemoMain {
11     public static void main(String[] args){
12         //membuat Object Outerdemo
13         OuterDemo2 outer = new OuterDemo2();
14
15         //Membuat Object InnerDemo
16         OuterDemo2.Inner_Demo inner = outer.new Inner_Demo();
17         System.out.println(inner.getNum());
18     }
19 }
20 }
```

Output - Modul 11 (run)

```
run:
Ini adalah nilai dari variable private outerDemo by suryo
180053
BUILD SUCCESSFUL (total time: 0 seconds)
```

Modul 11 - NetBeans IDE 8.2

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

Projects X Outer.java OuterDemo.java OuterDemo2.java OuterDemoMain.java Outer_Demo.java suryonested.java suryodemo.java

Source History

```
1 /* To change this license header, choose License Headers in Project Properties.
2 * To change this template file, choose Tools | Templates
3 * and open the template in the editor.
4 */
5
6 /**
7 *
8 * @author LABRPL-29
9 */
10 public class OuterDemo2 {
11     private int num = 180053;
12     public class Inner_Demo{
13         public int getNum(){
14             System.out.println("Ini adalah nilai dari variable private outerDemo by suryo");
15             return num;
16         }
17     }
18 }
19
20 }
```

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

- Title Bar:** Modul 11 - 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, Select All, and others.
- Projects Tab:** Shows the project structure for "Modul 11". The "Source Packages" node contains several files: Outer.java, OuterDemo.java, Outer_Demo.java, suryonested.java, and suryodemo.java. Other nodes include "Libraries", "Test Libraries", and "Lathian".
- Code Editor:** Displays the content of the Outer.java file. The code defines a public class Outer with a static inner class NestedDemo. The main method creates an instance of NestedDemo and calls its myMethod() method, printing the output "Ini adalah Method static nested class".

```
1  /* To change this license header, choose License Headers in Project Properties.
2  * To change this template file, choose Tools | Templates
3  * and open the template in the editor.
4  */
5
6
7  /**
8  *
9  * @author LABRPL-29
10 */
11 public class Outer {
12     static class NestedDemo{
13         public void myMethod(){
14             System.out.println("Ini adalah Method" + "static nested class");
15         }
16     }
17
18     public static void main(String[] args){
19         Outer.NestedDemo nested = new Outer.NestedDemo();
20         nested.myMethod();
21     }
22 }
```

- Output Tab:** Shows the run log:

```
run:
Ini adalah Method static nested class
BUILD SUCCESSFUL (total time: 0 seconds)
```
- Bottom Bar:** Includes icons for Start, Task View, File Explorer, Recycle Bin, Task List, and a search bar labeled "Type here to search".
- System Tray:** Shows the date and time as 10:52 AM on 12/23/2019.

BAB 12

MODUL 12

1. Demo label

A screenshot of the NetBeans IDE 8.2 interface. The top menu bar includes File, Edit, View, Navigate, Source, Refactor, Run, Debug, Profile, Team, Tools, and Window, along with a Help option and a search bar. The left sidebar shows the 'Projects' tree, which contains a module named 'modul11' with several source packages (a, b, Test Packages, Libraries, Test Libraries, ProjectanhPBO) and their respective Java files like DemoLabel.java, DemoRadioButton.java, etc. Below the projects tree is an 'Output - modul11 (run)' panel showing a 'run:' message. The main workspace has tabs for 'Start Page', 'Penguins.jpg', and 'FrameB.java'. The 'FrameB.java' tab is active, displaying Java code for a Swing application. The code defines a class 'FrameB' that extends 'JFrame'. It sets the title to 'Frame dan Button', the size to 500x500, and the default close operation to EXIT_ON_CLOSE. It also sets the location relative to null. The main method creates a new 'FrameB' frame, adds a JPanel panel, sets an image as the background, and adds two JButton components ('OK' and 'Image'). To the right of the code editor is a preview window titled 'Frame dan Button' showing three King penguins. At the bottom of the screen is a taskbar with various icons and the system tray.

2. DemoRadioButton

modul11 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects X Start Page X Belajar mengenal GUI

Modul Praktikum Pemrograman Berorientasi Objek jelas dan mudah. Sangat tidak setuju Tidak setuju Kurang setuju Setuju Sangat setuju

```

1 package a;
2
3 import javax.swing.JButtonGroup;
4 import javax.swing.JLabel;
5 import javax.swing.JPanel;
6 import javax.swing.JRadioButton;
7
8 public class DemoRadioButton {
9     public static void main(String[] args) {
10         Utama u = new Utama();
11         u.setSize(1000, 100);
12
13         JRadioButton[] teams = new JRadioButton[5];
14         teams [0] = new JRadioButton("Sangat tidak setuju");
15         teams [1] = new JRadioButton("Tidak setuju");
16         teams [2] = new JRadioButton("Kurang setuju");
17         teams [3] = new JRadioButton("Setuju");
18         teams [4] = new JRadioButton("Sangat setuju");
19
20         JPanel panel = new JPanel();

```

:Output modul11 (run) X modul11 (run) #2 X modul11 (run) #3 X modul11 (run) #4 X modul11 (run) #5 X

run:

Output Type here to search 11:58 AM 12/23/2019

3. DemoTextField

modul11 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects X Start Page X Penguins.jpg X FrameB.java X Tugas2.java X Tugas1.java X DemoTextField.java X

Belajar mengenal GUI

```

1 package a;
2
3 import javax.swing.JLabel;
4 import javax.swing.JPanel;
5 import javax.swing.JPasswordField;
6 import javax.swing.JTextField;
7
8
9 public class DemoTextField {
10     public static void main(String[] args) {
11         Utama u = new Utama();
12         JLabel nama = new JLabel();
13         JLabel password = new JLabel();
14         JTextField inputNama = new JTextField();
15         JPasswordField inputpassword = new JPasswordField();
16
17         JPanel panel = new JPanel();
18         panel.add(nama);
19         panel.add(inputNama);
20         panel.add(password);

```

:Output modul11 (run) X modul11 (run) #2 X modul11 (run) #3 X modul11 (run) #4 X

run:

Output Type here to search 11:58 AM 12/23/2019

4. Frame A

modul12 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

modul12

Source Packages GUI

DemoLabel.java DemoRadioButton.java DemoTextField.java FrameA.java FrameB.java Lighthouse.jpg Tugas1.java Tugas2.java Tulips.jpg Utama.java

Test Packages Libraries Test Libraries package Space PBO ProjectakhirPBO

Source History

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

Output - modul12 (run)

run:

modul12 (run) running... 90% ENG 4:05 AM US 12/21/2019

5. Frame B

modul12 - NetBeans IDE 8.2

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

Search (Ctrl+F)

Projects Services Files

modul12

Source Packages GUI

DemoLabel.java DemoRadioButton.java DemoTextField.java FrameA.java FrameB.java Lighthouse.jpg Tugas1.java Tugas2.java Tulips.jpg Utama.java

Test Packages Libraries Test Libraries package Space PBO ProjectakhirPBO

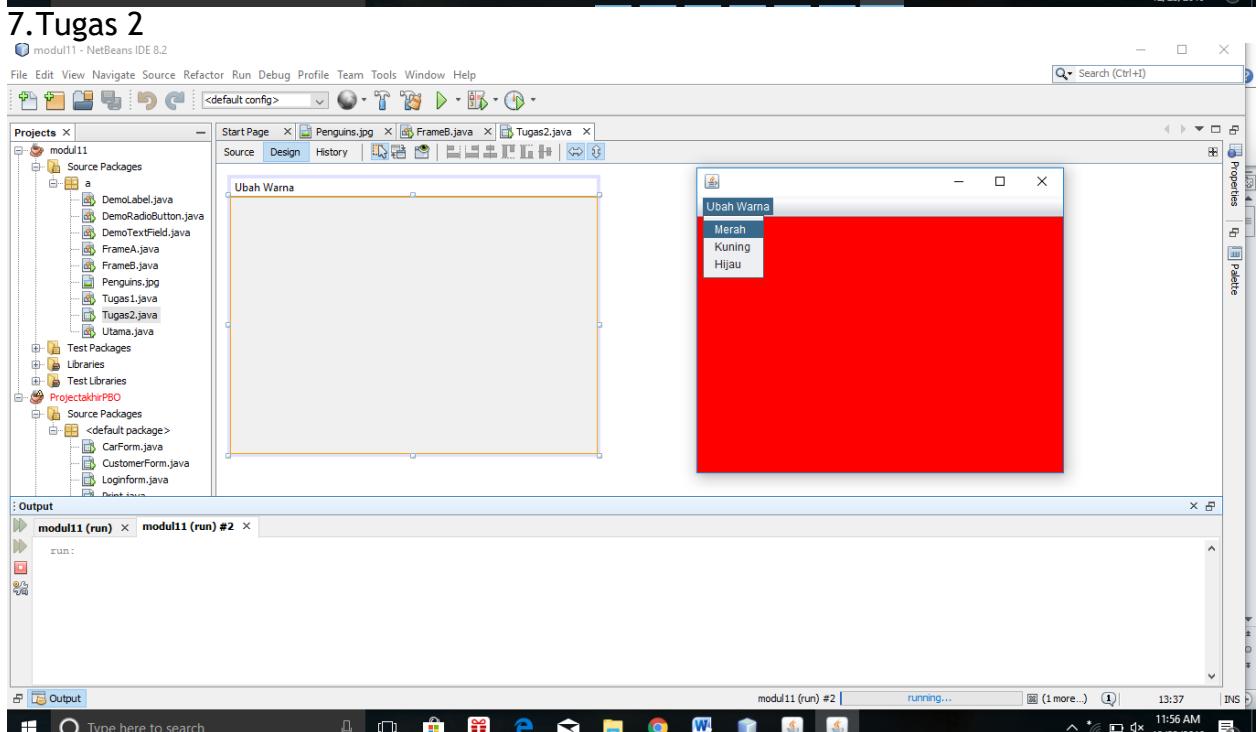
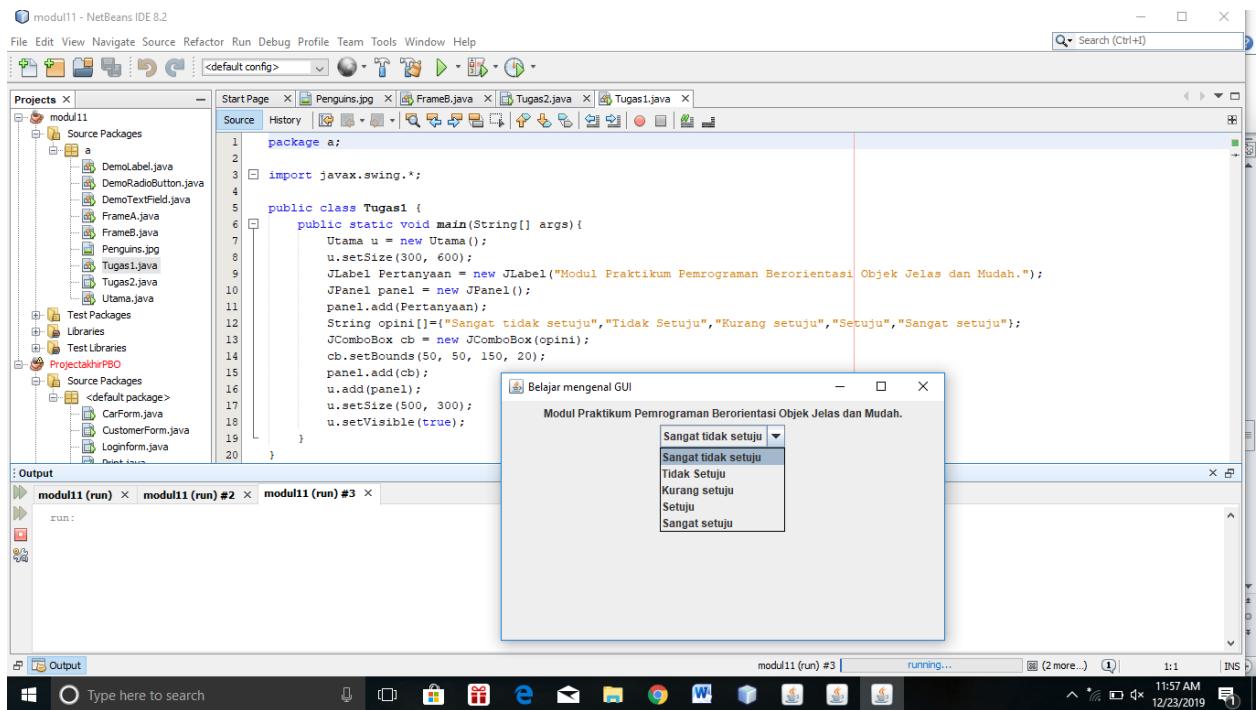
Source History

```
1 package GUI;
2
3 import java.net.URL;
4 import javax.swing.ImageIcon;
5 import javax.swing.JButton;
6 import javax.swing.JPanel;
7
8 public class FrameB extends javax.swing.JFrame {
9     public FrameB() {
10        super("Frame dan Button");
11        setSize(500, 500);
12        setDefaultCloseOperation(EXIT_ON_CLOSE);
13        setLocationRelativeTo(null);
14    }
15    public static void main(String[] args) {
16        FrameB fb = new FrameB();
17        JPanel panel = new JPanel();
18        URL img = FrameB.class.getResource("Lighthouse.jpg");
19        JButton jbtOK = new JButton("OK");
20        JButton jbtImg = new JButton(new ImageIcon(img));
21        panel.add(jbtOK);
22        panel.add(jbtImg);
23    }
24 }
```

Output

modul12 (run) #2 running... 86% ENG 4:06 AM US 12/21/2019

6. Tugas 1



8.Utama

