

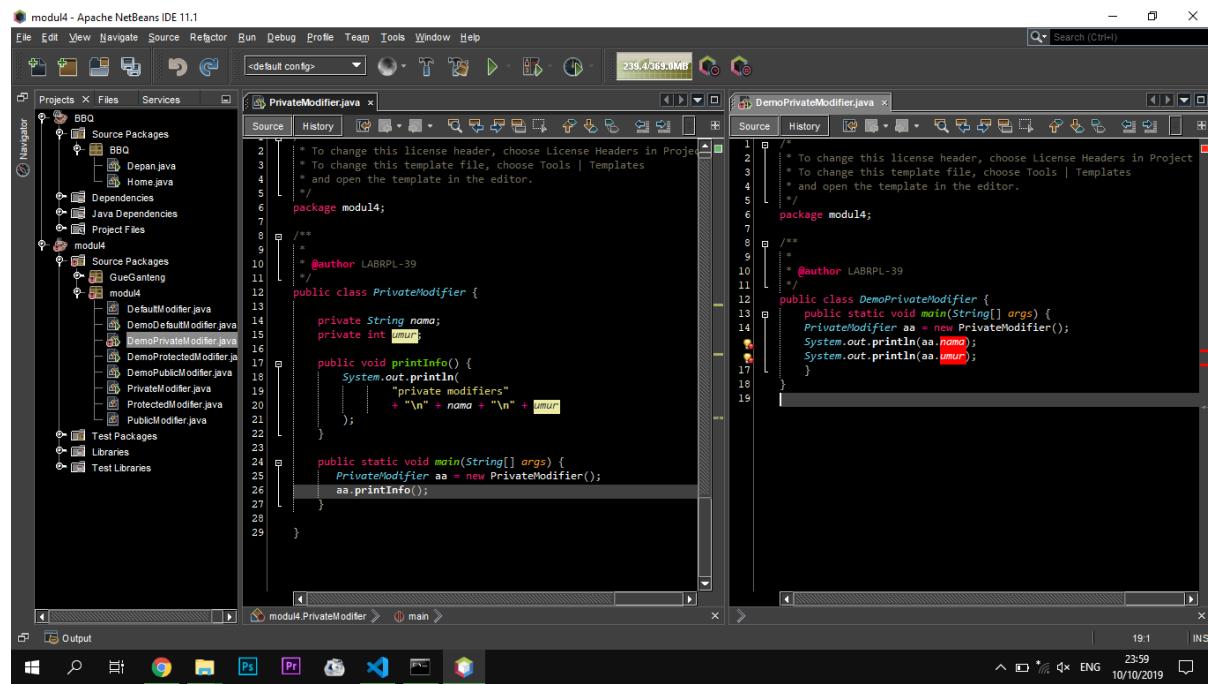
Nama : Wahyu Setyaji Rama Dwijaya

NIM : L200180065

Kelas : B

MODUL 4

Latihan 1



```
modul4 - Apache NetBeans IDE 11.1
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Source Packages
  BBQ
    Depan.java
    Home.java
  Dependencies
  Java Dependencies
Project Files
  modul4
    Source Packages
      GueGanteng
        modul4
          DefaultModifier.java
          DemoDefaultModifier.java
          DemoProtectedModifier.java
          DemoPublicModifier.java
          PrivateModifier.java
          ProtectedModifier.java
          PublicModifier.java
    Test Packages
    Libraries
    Test Libraries
Output
  239.4/369.0MB
  Search (Ctrl+F)
  19:1 INS
  10/10/2019
  Windows Taskbar icons
```

```
modul4 - Apache NetBeans IDE 11.1
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Source Packages
  BBQ
    Depan.java
    Home.java
  Dependencies
  Java Dependencies
Project Files
  modul4
    Source Packages
      GueGanteng
        modul4
          DemoPrivateModifier.java
    Test Packages
    Libraries
    Test Libraries
Output
  239.4/369.0MB
  Search (Ctrl+F)
  19:1 INS
  10/10/2019
  Windows Taskbar icons
```

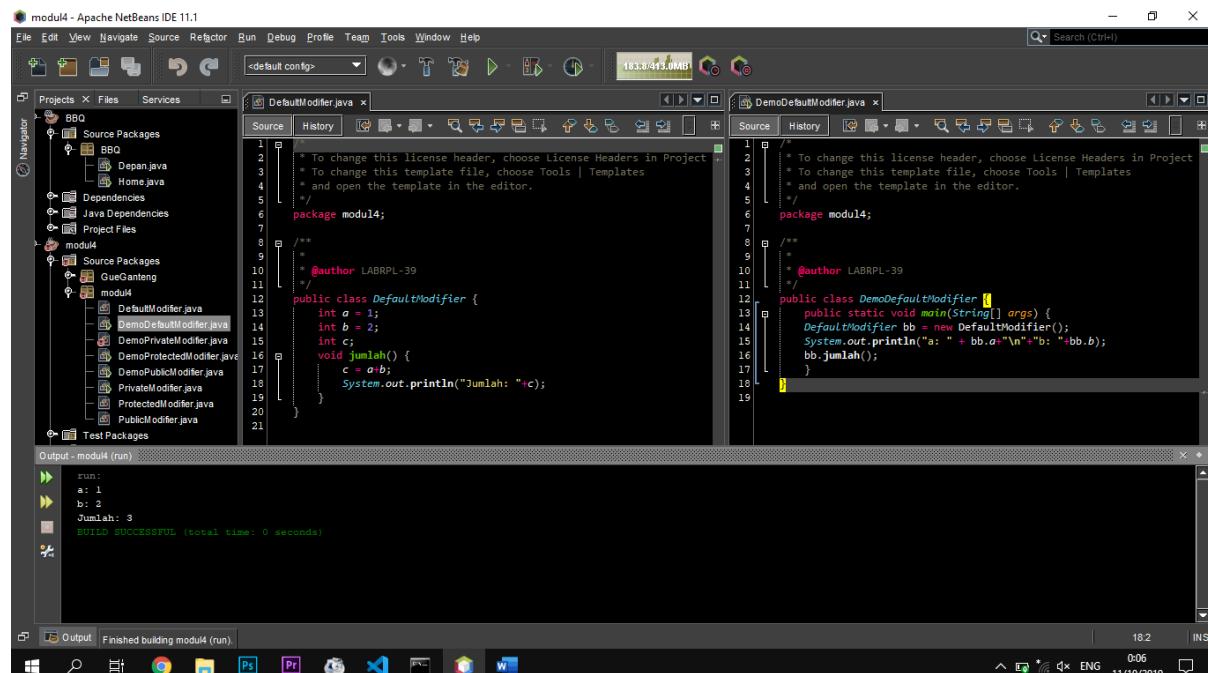
```
PrivateModifier.java
package modul4;
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates.
 * and open the template in the editor.
 */
public class PrivateModifier {
    /**
     * @author LABRPL-39
     */
    private String nama;
    private int umur;
    public void printInfo() {
        System.out.println(
            "private modifiers"
            + "\n" + nama + "\n" + umur
        );
    }
    public static void main(String[] args) {
        PrivateModifier aa = new PrivateModifier();
        aa.printInfo();
    }
}

DemoPrivateModifier.java
package modul4;
/*
 * 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 DemoPrivateModifier {
    /**
     * @author LABRPL-39
     */
    public static void main(String[] args) {
        PrivateModifier aa = new PrivateModifier();
        System.out.println(aa.nama);
        System.out.println(aa.umur);
    }
}
```

Private Variabel tidak dapat dipanggil langsung di Class lain.

Latihan 2

1.



```
modul4 - Apache NetBeans IDE 11.1
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Source Packages
  BBQ
    Depan.java
    Home.java
  Dependencies
  Java Dependencies
Project Files
  modul4
    Source Packages
      GueGanteng
        modul4
          DefaultModifier.java
          DemoDefaultModifier.java
          DemoProtectedModifier.java
          DemoPublicModifier.java
          PrivateModifier.java
          ProtectedModifier.java
          PublicModifier.java
    Test Packages
Output - modul4 (run)
  run:
  a: 1
  b: 2
  Jumlah: 3
  BUILD SUCCESSFUL (total time: 0 seconds)
  18.2 INS
  11/10/2019
  Windows Taskbar icons
```

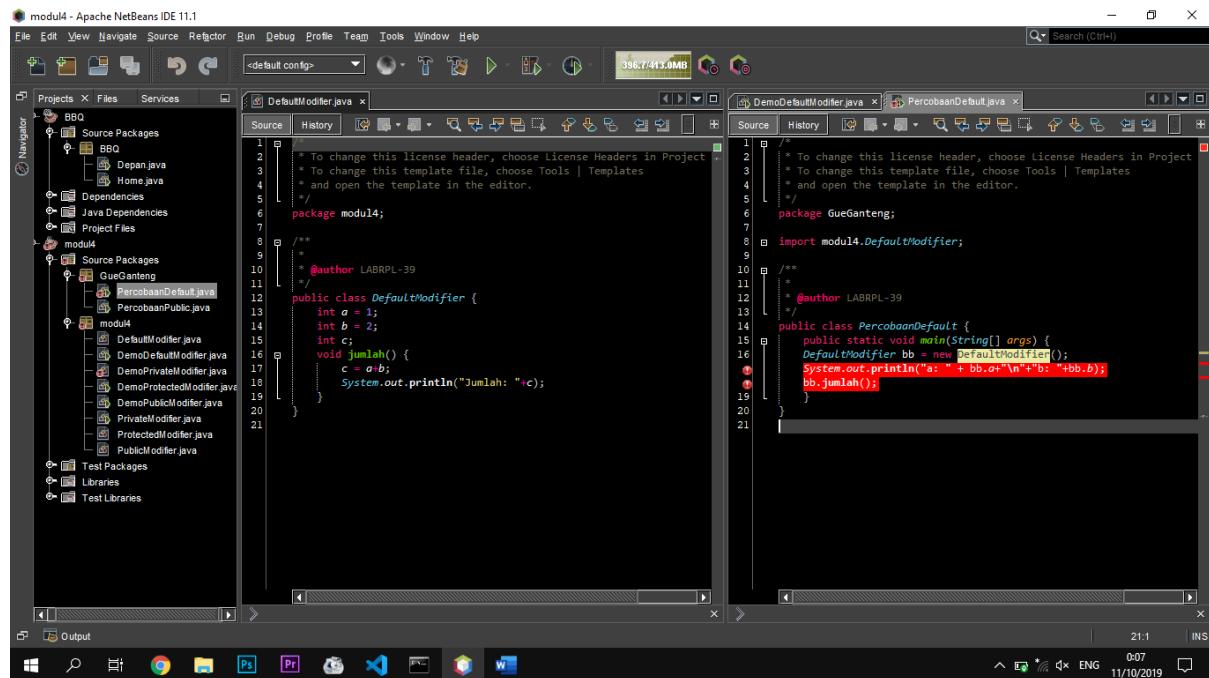
```
modul4 - Apache NetBeans IDE 11.1
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Source Packages
  BBQ
    Depan.java
    Home.java
  Dependencies
  Java Dependencies
Project Files
  modul4
    Source Packages
      GueGanteng
        modul4
          DemoDefaultModifier.java
    Test Packages
    Libraries
    Test Libraries
Output - modul4 (run)
  run:
  a: 1
  b: 2
  Jumlah: 3
  BUILD SUCCESSFUL (total time: 0 seconds)
  18.2 INS
  11/10/2019
  Windows Taskbar icons
```

```
DefaultModifier.java
package modul4;
/*
 * 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 DefaultModifier {
    int a = 1;
    int b = 2;
    int c;
    void jumlah() {
        c = a+b;
        System.out.println("Jumlah: "+c);
    }
}

DemoDefaultModifier.java
package modul4;
/*
 * 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 DemoDefaultModifier {
    /**
     * @author LABRPL-39
     */
    public static void main(String[] args) {
        DefaultModifier bb = new DefaultModifier();
        System.out.println("a: " + bb.a+"\nb: "+bb.b);
        bb.jumlah();
    }
}
```

Default Variable dapat diakses dari Class lain selama satu package.

2.

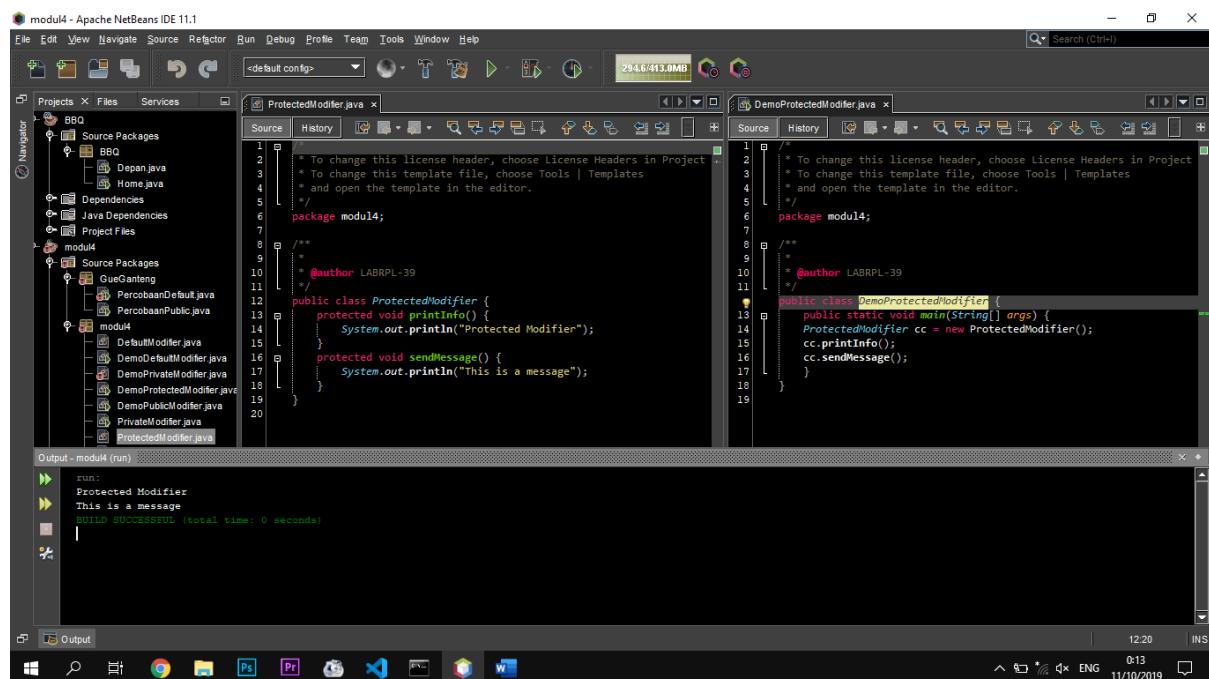


```
DefaultModifier.java
1  /*
2  * To change this license header, choose License Headers in Project
3  * Properties. To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6 package modul4;
7
8 /**
9  * 
10 * @author LABRPL-39
11 */
12 public class DefaultModifier {
13     int a = 1;
14     int b = 2;
15     int c;
16     void jumlah() {
17         c = a+b;
18         System.out.println("Jumlah: "+c);
19     }
20 }
```

```
DemoDefaultModifier.java
1  /*
2  * To change this license header, choose License Headers in Project
3  * Properties. To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6 package GueGanteng;
7
8 import modul4.DefaultModifier;
9
10 /**
11  * 
12  * @author LABRPL-39
13 */
14 public class DemoDefaultModifier {
15     public static void main(String[] args) {
16         DefaultModifier bb = new DefaultModifier();
17         System.out.println("a: " + bb.a+"\n" "b: "+bb.b);
18         bb.jumlah();
19     }
20 }
```

Default Variable tidak dapat diakses dari package lain.

Latihan 3



```
ProtectedModifier.java
1  /*
2  * To change this license header, choose License Headers in Project
3  * Properties. 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-39
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 a message");
18     }
19 }
```

```
DemoProtectedModifier.java
1  /*
2  * To change this license header, choose License Headers in Project
3  * Properties. 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-39
11 */
12 public class DemoProtectedModifier {
13     public static void main(String[] args) {
14         ProtectedModifier cc = new ProtectedModifier();
15         cc.printInfo();
16         cc.sendMessage();
17     }
18 }
```

```
Output - modul4 (run)
run:
Protected Modifier
This is a message
BUILD SUCCESSFUL (total time: 0 seconds)
```

Protected Variable dapat diakses dari Class lain.

Latihan 4

1.

The screenshot shows the Apache NetBeans IDE interface with two code editors open. The left editor contains `PublicModifier.java` and the right editor contains `DemoPublicModifier.java`. Both files include a license header and a copyright notice. The `PublicModifier.java` file defines a class `PublicModifier` with public variables `a`, `b`, and `c`, and a method `kali()` that multiplies them. The `DemoPublicModifier.java` file imports `PublicModifier` and creates an instance `dd` to call `dd.kali()`. The output window shows the results of running the project, including the values of `a`, `b`, `c`, and the result of the multiplication.

```
PublicModifier.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 modul4;

/**
 *
 * @author LABRPL-39
 */
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);
    }
}

DemoPublicModifier.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 GueGanteng;

import modul4.PublicModifier;

/**
 *
 * @author LABRPL-39
 */
public class DemoPublicModifier {
    public static void main(String[] args) {
        PublicModifier dd = new PublicModifier();
        System.out.println("a: "+dd.a+"\n"+ "b: "+dd.b+"\n"+ "c: "+dd.c);
        dd.kali();
    }
}

Output - modul4 (run)
run:
a: 2
b: 5
c: 9
Hasil Kali = 90
BUILD SUCCESSFUL (total time: 0 seconds)
```

Public Variable dapat diakses dari manapun.

2.

The screenshot shows the Apache NetBeans IDE interface with two code editors open. The left editor contains `PublicModifier.java` and the right editor contains `DemoPublicModifier.java`. The `PublicModifier.java` file defines a class `PublicModifier` with public variables `a`, `b`, and `c`, and methods `tambah()`, `kurang()`, `bagi()`, and `rata_rata()`. The `DemoPublicModifier.java` file imports `PublicModifier` and creates an instance `dd` to call these methods. The output window shows the results of running the project, including the values of `a`, `b`, `c`, and the results of the arithmetic operations.

```
PublicModifier.java
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 Jumlah = "+d);
}
public void kurang() {
    int d = a-b-c;
    System.out.println("Hasil Kurang = "+d);
}
public void bagi() {
    double d = a/b/c;
    System.out.println("Hasil Bagi = "+d);
}
public void rata_rata() {
    double d = (a+b+c)/3;
    System.out.println("Hasil Rata-Rata = "+d);
}

DemoPublicModifier.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 modul4;

/**
 *
 * @author LABRPL-39
 */
public class DemoPublicModifier {
    public static void main(String[] args) {
        PublicModifier dd = new PublicModifier();
        System.out.println("a: "+dd.a+"\n"+ "b: "+dd.b+"\n"+ "c: "+dd.c);
        dd.kali();
        dd.tambah();
        dd.kurang();
        dd.bagi();
        dd.rata_rata();
    }
}

Output - modul4 (run)
run:
a: 2
b: 5
c: 9
Hasil Kali = 90
Hasil Jumlah = 16
Hasil Kurang = -12
Hasil Bagi = 0.0
Hasil Rata-Rata = 5.0
BUILD SUCCESSFUL (total time: 0 seconds)
```