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Laporan Modul ke 10

10.2 Implementasi Interface

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

- File Menu:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Search Bar:** Search (Ctrl+F)
- Projects Tab:** Projects X Files Services
- Source Editor:** Shows the code for `Mammalia.java`. The code implements the `ActivityAnimal` interface with methods `eat()`, `travel()`, and `noOfLegs()`. It also contains a `main()` method.

```
public class Mammalia implements ActivityAnimal{
    public void eat(){
        System.out.println("Mammal eats");
    }

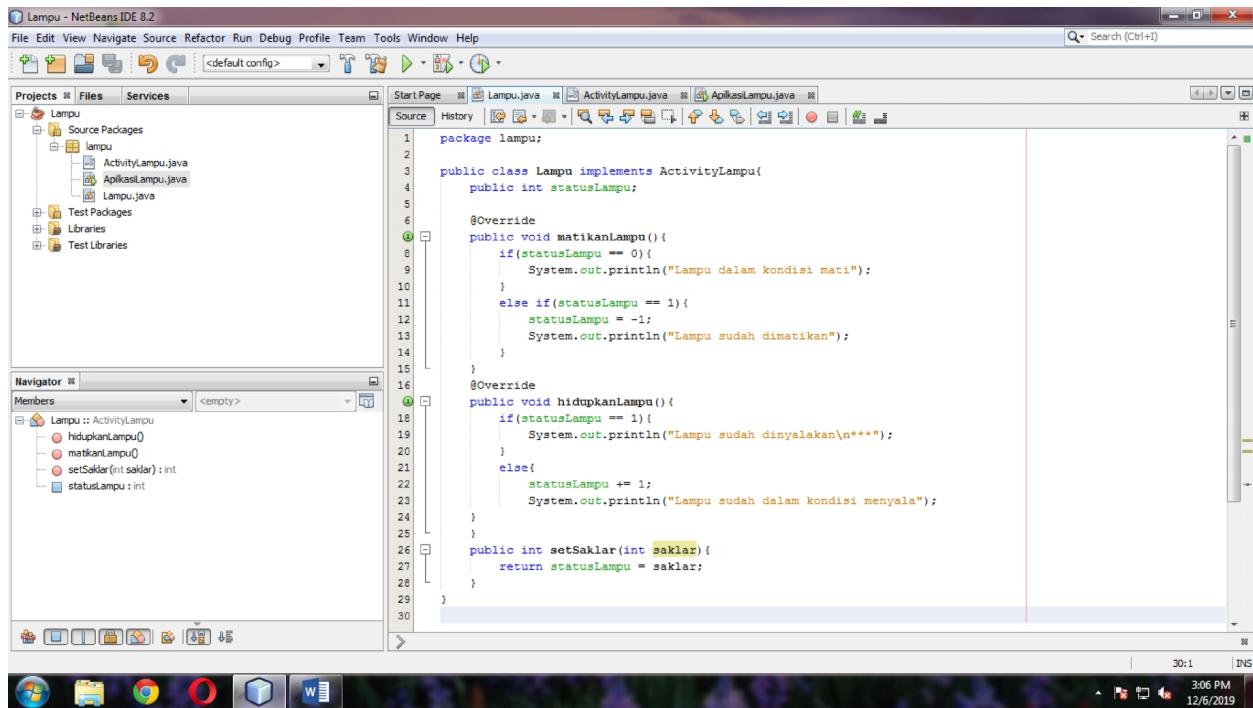
    public void travel(){
        System.out.println("Mammal travels");
    }

    public int noOfLegs(){
        return 0;
    }

    public static void main(String[] args){
        Mammalia m = new Mammalia();
        m.eat();
        m.travel();
    }
}
```

- Maven - Navigator:** Shows the members of the `Mammalia` class, which include `eat()`, `main(String[] args)`, `noOfLegs() : int`, and `travel()`.
- Output - Modul 10 (run):** Shows the output of the run command, displaying "Mammal eats" and "Mammal travels".
- System Tray:** Shows icons for various system applications like Task Manager, File Explorer, and Control Panel.
- Bottom Status Bar:** Shows the time as 8:48 PM and the keyboard status as INS.

10.2.1 Percobaan



Lampu - NetBeans IDE 8.2

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

Projects Files Services

Start Page Lampu.java ActivityLampu.java ApikasLampu.java

Source History

```
1 package lampu;
2
3 public class Lampu implements ActivityLampu{
4     public int statusLampu;
5
6     @Override
7     public void matikanLampu(){
8         if(statusLampu == 0){
9             System.out.println("Lampu dalam kondisi mati");
10        }
11        else if(statusLampu == 1){
12            statusLampu = -1;
13            System.out.println("Lampu sudah dimatikan");
14        }
15    }
16    @Override
17    public void hidupkanLampu(){
18        if(statusLampu == 1){
19            System.out.println("Lampu sudah dinyalakan\n***");
20        }
21        else{
22            statusLampu += 1;
23            System.out.println("Lampu sudah dalam kondisi menyala");
24        }
25    }
26    public int setSaklar(int saklar){
27        return statusLampu = saklar;
28    }
29 }
```

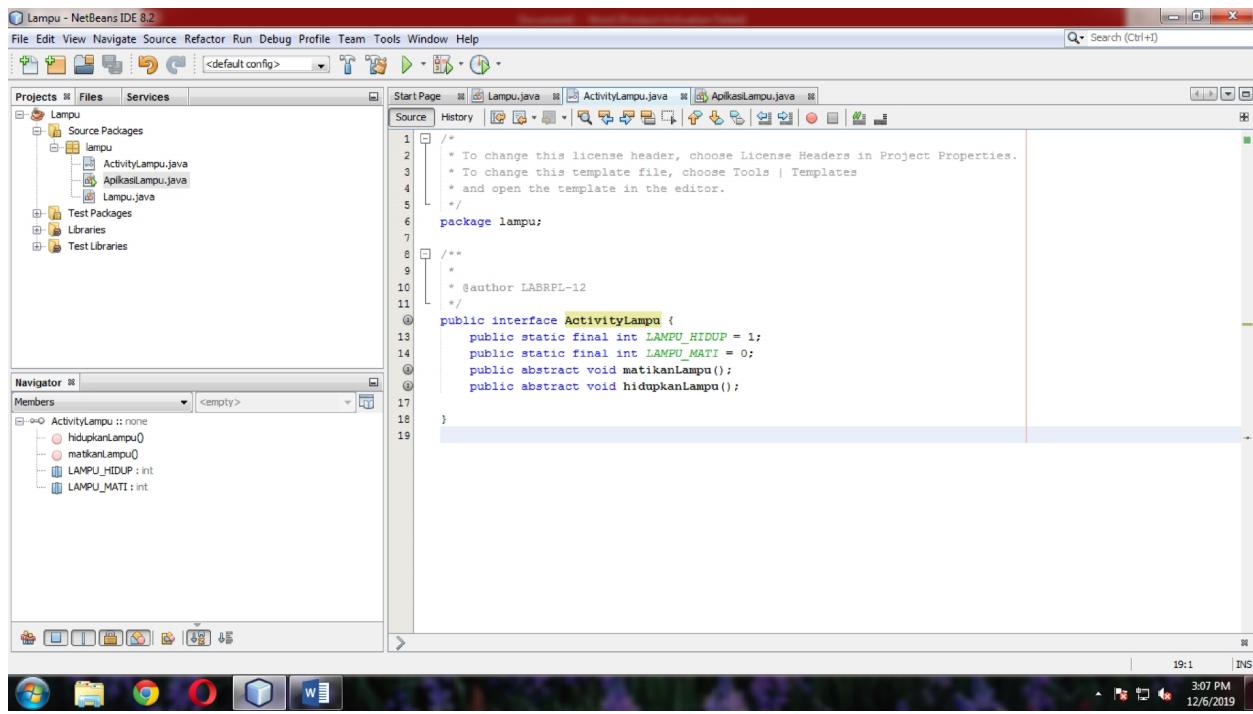
Navigator

Members

- Lampu :: ActivityLampu
 - hidupkanLampu()
 - matikanLampu()
 - setSaklar(int saklar) : int
 - statusLampu : int

30:1 INS

3:06 PM 12/6/2019



Lampu - NetBeans IDE 8.2

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

Projects Files Services

Start Page Lampu.java ActivityLampu.java ApikasLampu.java

Source History

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

Navigator

Members

- ActivityLampu :: none
 - hidupkanLampu()
 - matikanLampu()
 - LAMPU_HIDUP : int
 - LAMPU_MATI : int

19:1 INS

3:07 PM 12/6/2019

Lampu - NetBeans IDE 8.2

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

Projects Files Services

Start Page Lampu.java ActivityLampu.java ApikasiLampu.java

Source History

```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6  package lampu;
7  import java.util.Scanner;
8  /**
9  *
10 * @author LABRPL-12
11 */
12 public class ApikasiLampu {
13     public static void main(String[] args) {
14         Lampu lampu = new Lampu();
15         Scanner sc = new Scanner(System.in);
16         lampu.statusLampu = lampu.setSaklar(0);
17         System.out.println("Status lampu = " + lampu.statusLampu + "\nKetikkan");
18         System.out.println("1 untuk menyalaikan lampu \n0 untuk mematikan lampu");
19
20         if(lampu.setSaklar(sc.nextInt()) == 0){
21             lampu.matiakanLampu();
22         }
23         else{
24             lampu.hidupkanLampu();
25         }
26     }
27 }
28 }
```

Navigator

Members

ApikasiLampu

main(String[] args)

29:1 3:07 PM 12/6/2019

-output

NetBeans IDE 8.2

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

Projects Files Services

Start Page Lampu.java ActivityLampu.java ApikasiLampu.java

Source History

```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6  package lampu;
7  import java.util.Scanner;
8  /**
9  *
10 * @author LABRPL-12
11 */
12 public class ApikasiLampu {
13     public static void main(String[] args) {
14         Lampu lampu = new Lampu();
15         Scanner sc = new Scanner(System.in);
16         lampu.statusLampu = lampu.setSaklar(0);
17         System.out.println("Status lampu = " + lampu.statusLampu + "\nKetikkan");
18         System.out.println("1 untuk menyalaikan lampu \n0 untuk mematikan lampu");
19
20         if(lampu.setSaklar(sc.nextInt()) == 0){
21             lampu.matiakanLampu();
22         }
23         else{
24             lampu.hidupkanLampu();
25         }
26     }
27 }
```

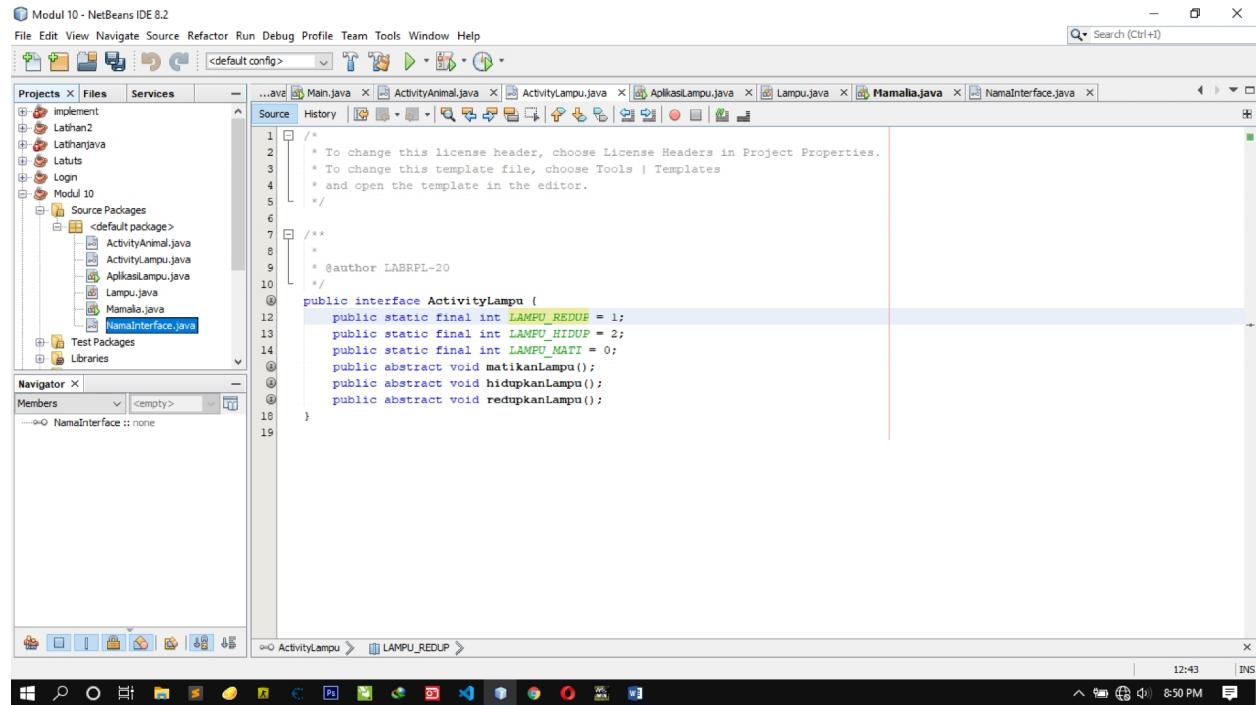
Output - Lampu (run)

run:
Status lampu = 0
Ketikkan
1 untuk menyalaikan lampu
0 untuk mematikan lampu
1
Lampu sudah dinyalakan

BUILD SUCCESSFUL (total time: 8 seconds)

29:1 3:08 PM 12/6/2019

10.3 Tugas



Modul 10 - NetBeans IDE 8.2

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

Projects Files Services ...java Main.java X ActivityAnimal.java X ActivityLampu.java X AplikasiLampu.java X Lampu.java X Mammalia.java X NamaInterface.java X

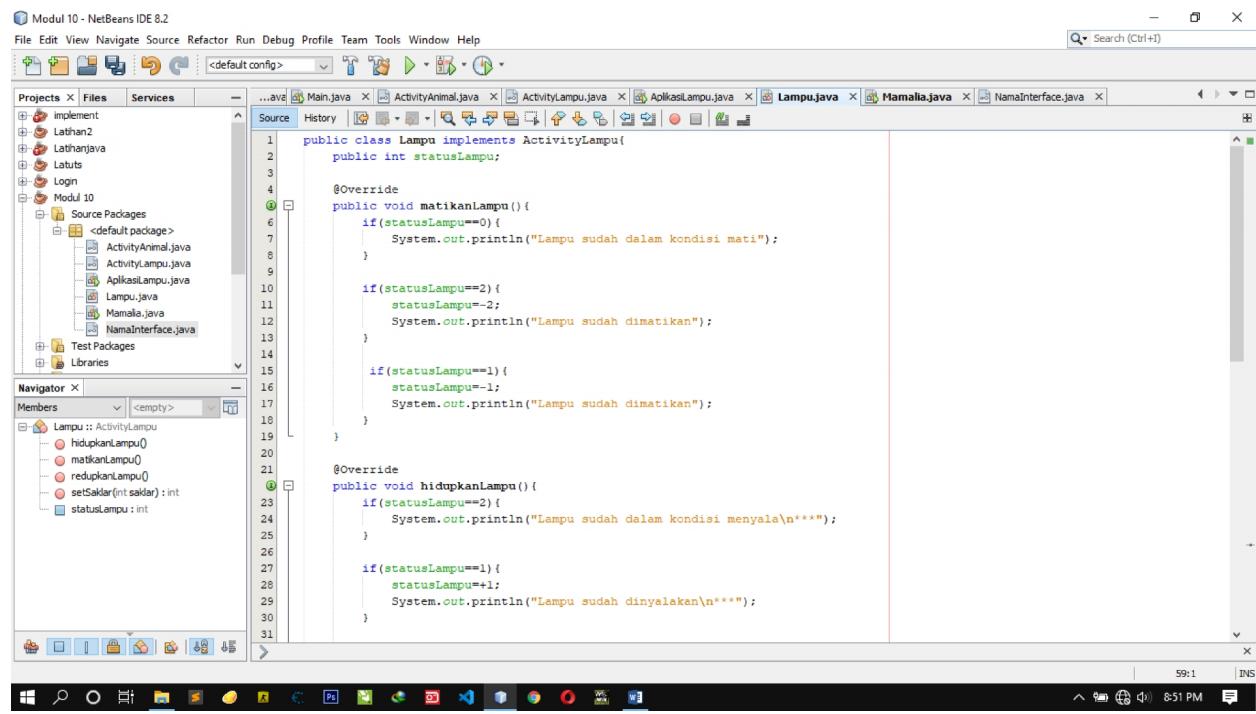
Source History

```
1  /*
2   * To change this license header, choose License Headers in Project Properties.
3   * To change this template file, choose Tools | Templates
4   * and open the template in the editor.
5   */
6
7 /**
8 *
9 * @author LABRPL-20
10 */
11 public interface ActivityLampu {
12     public static final int LAMPU_REDUCE = 1;
13     public static final int LAMPU_HIDUP = 2;
14     public static final int LAMPU_MATI = 0;
15     public abstract void matikanLampu();
16     public abstract void hidupkanLampu();
17     public abstract void redupkanLampu();
18 }
```

ActivityLampu > LAMPU_REDUP >

12:43 8:50 PM INS

This screenshot shows the NetBeans IDE interface with the ActivityLampu.java file open. The code defines an interface with three static final integer constants (LAMPU_REDUCE, LAMPU_HIDUP, LAMPU_MATI) and three abstract methods (matikanLampu, hidupkanLampu, redupkanLampu). The interface is annotated with a copyright notice and a Javadoc comment.



Modul 10 - NetBeans IDE 8.2

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

Projects Files Services ...java Main.java X ActivityAnimal.java X ActivityLampu.java X AplikasiLampu.java X Lampu.java X Mammalia.java X NamaInterface.java X

Source History

```
1 public class Lampu implements ActivityLampu{
2     public int statusLampu;
3
4     @Override
5     public void matikanLampu(){
6         if(statusLampu==0){
7             System.out.println("Lampu sudah dalam kondisi mati");
8         }
9
10        if(statusLampu==2){
11            statusLampu=-2;
12            System.out.println("Lampu sudah dimatikan");
13        }
14
15        if(statusLampu==1){
16            statusLampu=-1;
17            System.out.println("Lampu sudah dimatikan");
18        }
19
20    }
21
22    @Override
23    public void hidupkanLampu(){
24        if(statusLampu==2){
25            System.out.println("Lampu sudah dalam kondisi menyala\n***");
26        }
27
28        if(statusLampu==1){
29            statusLampu=+1;
30            System.out.println("Lampu sudah dinyalakan\n***");
31        }
32 }
```

Lampu > hidupkanLampu() > matikanLampu() > redupkanLampu() > setSaldo(int saldo) : int > statusLampu : int >

59:1 8:51 PM INS

This screenshot shows the NetBeans IDE interface with the Lampu.java file open. The code implements the ActivityLampu interface. It contains two overridden methods: matikanLampu and hidupkanLampu. The matikanLampu method prints a message if the lamp is off and changes its status to -2. The hidupkanLampu method prints a message if the lamp is on and changes its status to +1. The statusLampu variable is initialized to 0.

Modul 10 - NetBeans IDE 8.2

```

    if(statusLampu==1){
        statusLampu+=1;
        System.out.println("Lampu sudah dinyalakan\n***");
    }

    if(statusLampu==0){
        statusLampu+=2;
        System.out.println("Lampu sudah dinyalakan");
    }
}

@Override
public void redupkanLampu(){
    if(statusLampu==1){
        System.out.println("Lampu sudah dalam kondisi redup");
    }

    if(statusLampu==0){
        System.out.println("Lampu dalam kondisi mati");
    }

    if(statusLampu==2){
        statusLampu=-1;
        System.out.println("Lampu sudah diredukan");
    }
}

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

```

Modul 10 - NetBeans IDE 8.2

```

import java.util.Scanner;

public class AplikasiLampu {
    public static void main(String[] args){
        Lampu lampu = new Lampu();
        Scanner sc = new Scanner(System.in);
        lampu.statusLampu = lampu.setSaklar(0);

        System.out.println("Status Lampu = " + lampu.statusLampu + "\nketikkan");
        System.out.println("2 Untuk meredupkan lampu\n1 Untuk menyalakan lampu\n0 Untuk mematikan lampu");

        int UserInput = sc.nextInt();

        if(UserInput==0){
            lampu.matiakanLampu();
        }

        if(UserInput==2){
            lampu.redupkanLampu();
        }

        if(UserInput==1){
            lampu.hidupkanLampu();
        }
    }
}

```

-output

