

Mata Kuliah : PBO – TI – S1

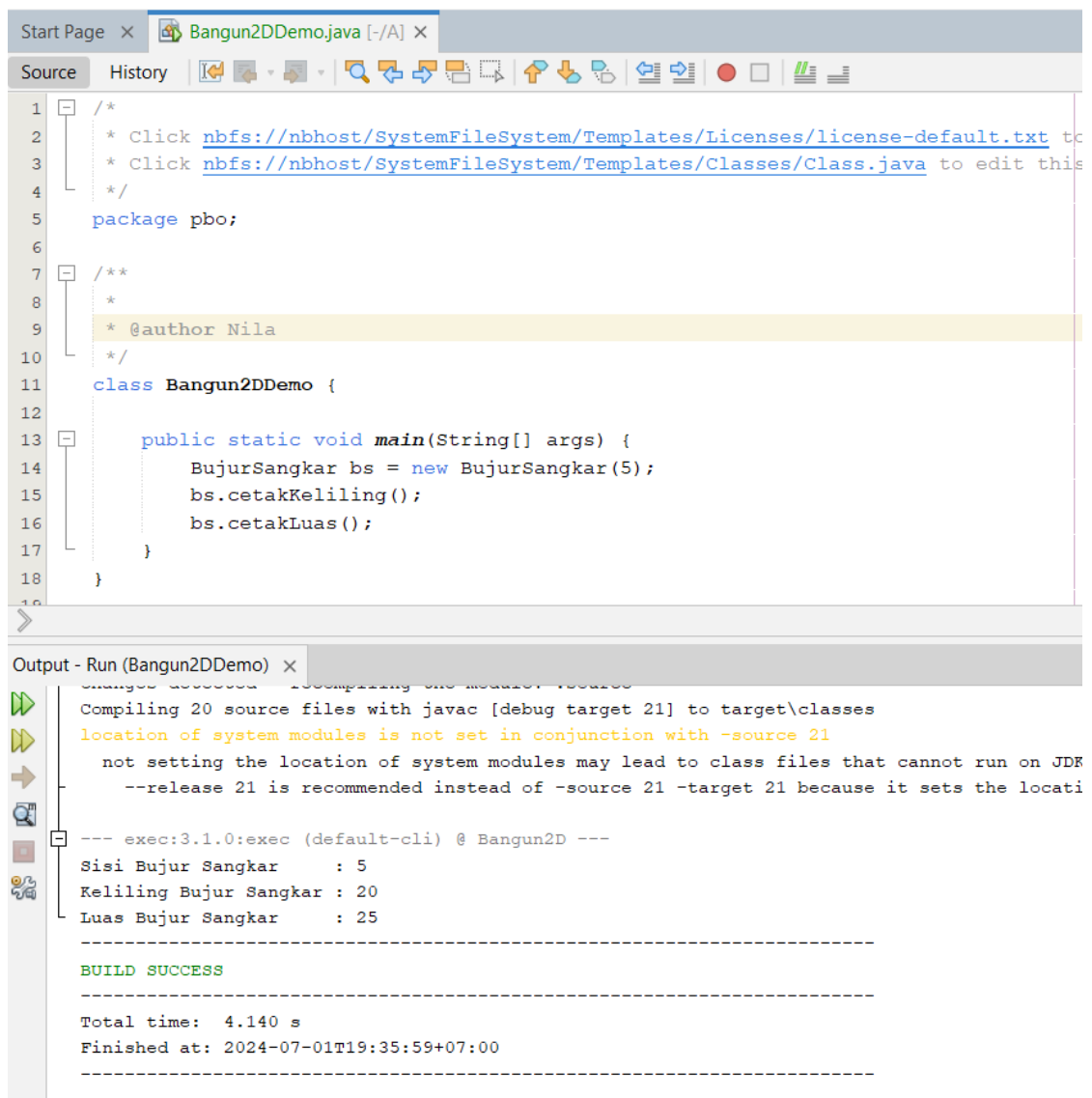
Pertemuan : 10

NIM : A11.2022.14667

Nama : Nila Farihah

Package pbo

Hasil Program :



The screenshot displays an IDE window titled 'Bangun2DDemo.java [-/A] X'. The 'Source' tab is active, showing the following Java code:

```
1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to
3   * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this
4   */
5   package pbo;
6
7   /**
8    *
9    * @author Nila
10   */
11   class Bangun2DDemo {
12
13       public static void main(String[] args) {
14           BujurSangkar bs = new BujurSangkar(5);
15           bs.cetakKeliling();
16           bs.cetakLuas();
17       }
18   }
```

The 'Output - Run (Bangun2DDemo) X' tab is also visible, showing the following output:

```
Compiling 20 source files with javac [debug target 21] to target\classes
location of system modules is not set in conjunction with -source 21
not setting the location of system modules may lead to class files that cannot run on JDK
--release 21 is recommended instead of -source 21 -target 21 because it sets the locati

--- exec:3.1.0:exec (default-cli) @ Bangun2D ---
Sisi Bujur Sangkar      : 5
Keliling Bujur Sangkar : 20
Luas Bujur Sangkar      : 25

BUILD SUCCESS

Total time: 4.140 s
Finished at: 2024-07-01T19:35:59+07:00
```

Kode Program :

```
package pbo;
public abstract class Bangun2D
{
    public abstract void cetakLuas();
    public abstract void cetakKeliling();
}

package pbo;
public class BujurSangkar extends Bangun2D
{
    private int sisi;
    public BujurSangkar(int sisi)
    {
        this.sisi = sisi;
        System.out.println("Sisi Bujur Sangkar      : "+sisi);
    }

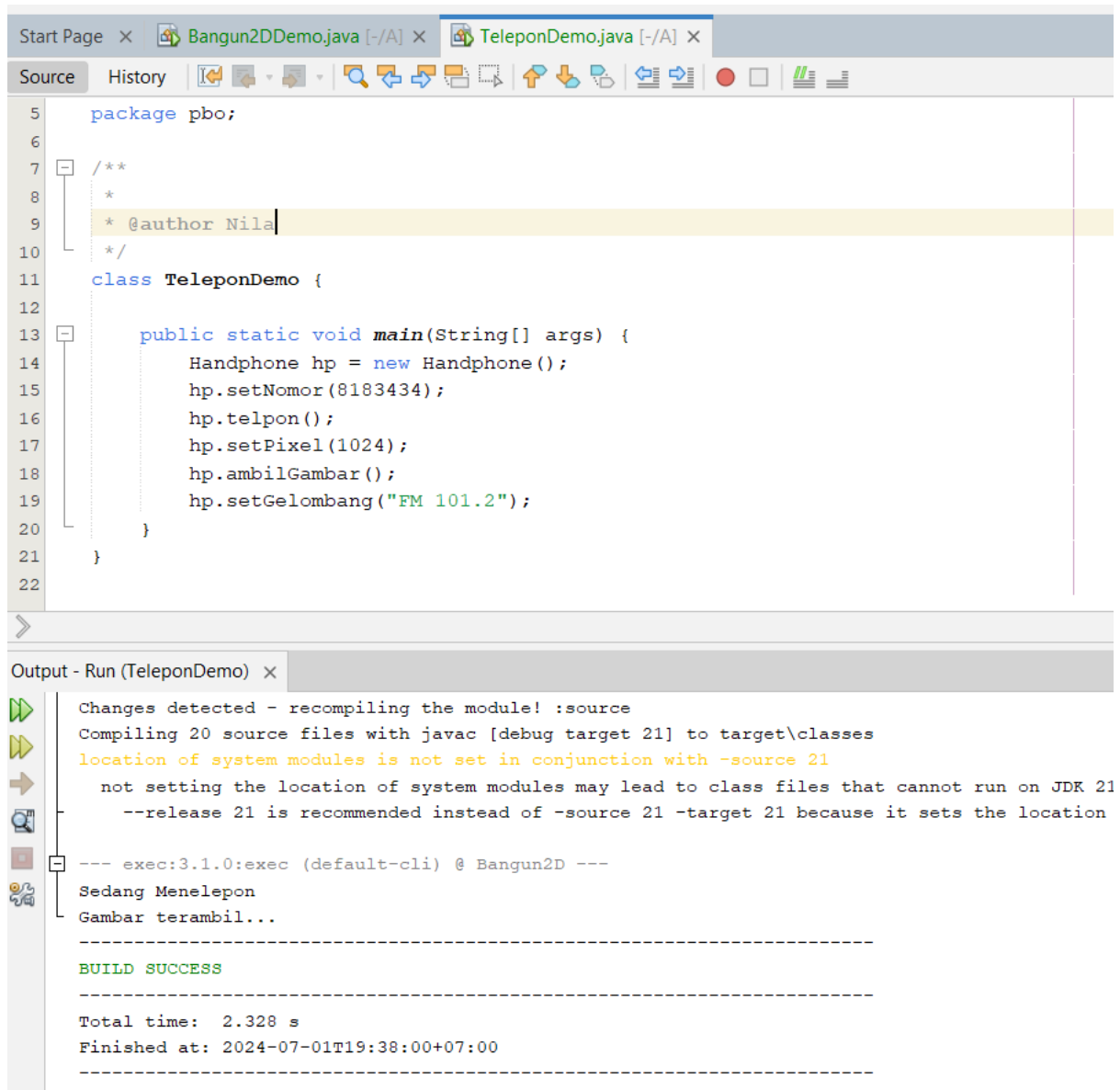
    public void cetakLuas()
    {
        int luas = sisi * sisi;
        System.out.println("Luas Bujur Sangkar      : "+luas);
    }

    public void cetakKeliling()
    {
        int keliling = 4 * sisi;
        System.out.println("Keliling Bujur Sangkar : "+keliling);
    }
}

package pbo;
class Bangun2DDemo
{
    public static void main(String[] args)
    {
        BujurSangkar bs=new BujurSangkar(5);
        bs.cetakKeliling();
        bs.cetakLuas();
    }
}
```

Latihan 2

Hasil Program :



The screenshot shows an IDE with two tabs: `Bangun2DDemo.java` and `TeleponDemo.java`. The `TeleponDemo.java` tab is active, displaying the following Java code:

```
5 package pbo;
6
7 /**
8  *
9  * @author Nila
10 */
11 class TeleponDemo {
12
13     public static void main(String[] args) {
14         Handphone hp = new Handphone();
15         hp.setNomor(8183434);
16         hp.telpon();
17         hp.setPixel(1024);
18         hp.ambilGambar();
19         hp.setGelombang("FM 101.2");
20     }
21 }
22
```

Below the code editor is the `Output - Run (TeleponDemo)` window, which displays the following output:

```
Changes detected - recompiling the module! :source
Compiling 20 source files with javac [debug target 21] to target\classes
location of system modules is not set in conjunction with -source 21
not setting the location of system modules may lead to class files that cannot run on JDK 21
--release 21 is recommended instead of -source 21 -target 21 because it sets the location

--- exec:3.1.0:exec (default-cli) @ Bangun2D ---
Sedang Menelepon
Gambar terambil...

=====
BUILD SUCCESS
=====

Total time: 2.328 s
Finished at: 2024-07-01T19:38:00+07:00
=====
```

Code Program :

```
package pbo;
public interface Kamera
{
    public void setPixel(float pixel);
    public void ambilGambar();
}
package pbo;
public interface Radio
{
    public void setGelombang(String gel);
}
package pbo;
abstract class Telepon
{
    protected long nomer;
    public void telpon()
    {
        System.out.println("Sedang Menelepon");
    }
}
class Handphone extends Telepon implements Kamera, Radio
{
    private String gelombang;
    private float pixel;

    public void ambilGambar()
    {
        System.out.println("Gambar terambil...");
    }

    public void setGelombang(String gel)
    {
        this.gelombang=gel;
    }

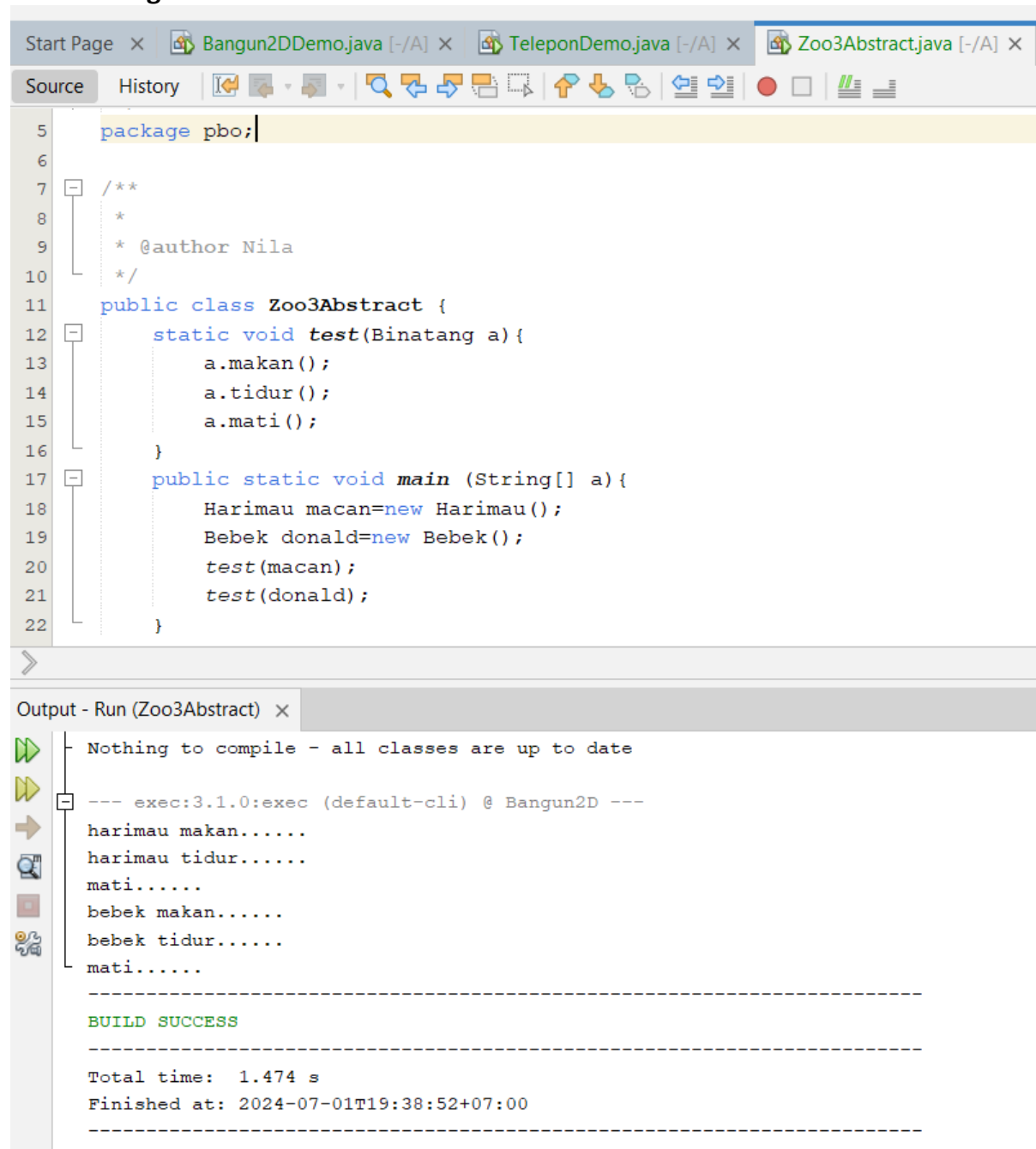
    public void setPixel(float pixel)
    {
        this.pixel=pixel;
    }

    public void setNomor(long no)
    {
        this.nomer=no;
    }
}
package pbo;
class TeleponDemo
{
    public static void main(String[]args)
    {
        Handphone hp=new Handphone();
        hp.setNomor(8183434);

        hp.telpon();
        hp.setPixel(1024);
        hp.ambilGambar();
        hp.setGelombang("FM 101.2");
    }
}
```

Latihan 2

Hasil Program :



The screenshot shows an IDE with three tabs: Start Page, Bangun2DDemo.java [-/A], and TeleponDemo.java [-/A]. The active tab is Zoo3Abstract.java [-/A]. The code in the editor is as follows:

```
5 package pbo;
6
7 /**
8  *
9  * @author Nila
10 */
11 public class Zoo3Abstract {
12     static void test(Binatang a){
13         a.makan();
14         a.tidur();
15         a.mati();
16     }
17     public static void main (String[] a){
18         Harimau macan=new Harimau();
19         Bebek donald=new Bebek();
20         test(macan);
21         test(donald);
22     }
```

Below the code editor is the Output - Run (Zoo3Abstract) window. It shows the following output:

```
Nothing to compile - all classes are up to date
--- exec:3.1.0:exec (default-cli) @ Bangun2D ---
harimau makan.....
harimau tidur.....
mati.....
bebek makan.....
bebek tidur.....
mati.....
-----
BUILD SUCCESS
-----
Total time: 1.474 s
Finished at: 2024-07-01T19:38:52+07:00
-----
```

Code Program :

Class Zoo3Abstract.java

```
package pbo;

/**
 *
 * @author Nila
 */
public class Zoo3Abstract {
    static void test(Binatang a){
```

```

        a.makan();
        a.tidur();
        a.mati();
    }
    public static void main (String[] a){
        Harimau macan=new Harimau();
        Bebek donald=new Bebek();
        test(macan);
        test(donald);
    }
}

```

Class Binatang.java

```

package pbo;

/**
 *
 * @author Nila
 */
abstract class Binatang{
    abstract void makan();
    abstract void tidur();
    void mati(){
        System.out.println("mati.....");
    }
}

```

Class Bebek.java

```

package pbo;

/**
 *
 * @author Nila
 */
class Bebek extends Binatang{
    void makan(){
        System.out.println("bebek makan.....");
    }
    void tidur(){
        System.out.println("bebek tidur.....");
    }
}

```

Class Harimau.java

```

package pbo;

/**
 *
 * @author Nila
 */

```

```
*/  
class Harimau extends Binatang{  
    void makan(){  
        System.out.println("harimau makan.....");  
    }  
    void tidur(){  
        System.out.println("harimau tidur.....");  
    }  
}
```

Latihan 3

Hasil Program :

```
| --- exec:3.1.0:exec (default-cli) @ Bangun2D ---  
| =====  
| =====MEJA TAMU=====  
| Harga          : 5000000  
| Bahan          : Jati Tua  
| Jumlah Kaki    : 5  
| Kaca           : Oval  
| Diskon         : 500000.0  
| Bayar          : 4500000.0  
| =====  
| =====MEJA MAKAN=====  
| Harga          : 5000000  
| Bahan          : Jati  
| Jumlah Kaki    : 6  
| Jumlah Kaki    : 4  
| Bayar          : 5000000  
| =====  
| =====ALMARI PAKAIAN=====  
| Harga          : 2500000  
| Bahan          : Stainless  
| Jumlah Pintu   : 4  
| Roda           : false  
| Diskon         : 375000.0  
| Bayar          : 2125000.0  
| =====  
| =====ALMARI MAKAN=====  
| Harga          : 1000000  
| Bahan          : Stainless  
| Jumlah Roda    : 8  
| Roda           : false  
| Diskon         : 500000.0  
| Bayar          : 500000.0  
| -----
```

Code Program :

```
public class MebelDemo {
    public static void main(String[] args) {
        System.out.println("=====");
        System.out.println("=====MEJA TAMU=====");
        MejaTamu mt=new MejaTamu();
        mt.harga=5000000;
        mt.bahan="Jati Tua";
        mt.jmlKaki=5;
        mt.bentukKaca="Oval";
        mt.discount( mt.harga);
        mt.cetak();
        System.out.println("=====");
        System.out.println("=====MEJA MAKAN=====");
        MejaMakan mm = new MejaMakan();
        mm.harga = 5000000;
        mm.bahan = "Jati";
        mm.jmlKaki = 4;
        mm.jmlKursi = 6;
        mm.cetak();
        System.out.println("=====");
        System.out.println("=====ALMARI PAKAIAN=====");
        AlmariPakaian ap=new AlmariPakaian();
        ap.harga=2500000;
        ap.bahan="Stainless";
        ap.roda=false;
        ap.jmlPintu=4;
        ap.discount( ap.harga);
        ap.cetak();
        System.out.println("=====");
        System.out.println("=====ALMARI MAKAN=====");
        AlmariMakan am=new AlmariMakan();
        am.harga=1000000;
        am.bahan="Stainless";
```

Class Meja.java

```
package pbo;

/**
 *
 * @author Nila
 */
public class Meja extends Mebel{
    public int jmlKaki;
}
```

Class MejaMakan.java

```
package pbo;

/**
 *
 * @author Nila
 */
public class MejaMakan extends Meja {
    public int jmlKursi;

    void cetak() {
        System.out.println("Harga\t\t: " + harga);
        System.out.println("Bahan\t\t: " + bahan);
        System.out.println("Jumlah Kaki\t: " + jmlKursi);
        System.out.println("Jumlah Kaki\t: " + jmlKaki);
        System.out.println("Bayar\t\t: " + (harga));
    }
}
```

Class MejaTamu.java

```
package pbo;

/**
 *
 * @author Nila
 */
public class MejaTamu extends Meja implements Discountable{
    public String bentukKaca;
    float diskon;
    public void discount(int harga){
        diskon=0.1f*harga;
    }
    void cetak(){
        System.out.println("Harga          : "+harga);
        System.out.println("Bahan          : "+bahan);
        System.out.println("Jumlah Kaki    : "+jmlKaki);
        System.out.println("Kaca           : "+bentukKaca);
        System.out.println("Diskon         : "+diskon);
        System.out.println("Bayar          : "+(harga-diskon));
    }
}
```

Class Almari.java

```
package pbo;

/**
 *
 * @author Nila
 */
public class Almari extends Mebel{
    boolean roda;
}
```

Class AlmariMakan.java

```
package pbo;

/**
 *
 * @author Nila
 */
public class AlmariMakan extends Almari implements
Discountable{
    int jmlRoda;
    float diskon;
    public void discount(int harga){
        diskon=0.20f*harga;
    }
    void cetak(){
        System.out.println("Harga          : "+harga);
        System.out.println("Bahan          : "+bahan);
        System.out.println("Jumlah Roda   : "+jmlRoda);
        System.out.println("Roda          : "+roda);
        System.out.println("Diskon        : "+diskon);
        System.out.println("Bayar         : "+(harga-diskon));
    }
}
```

Class AlmariPakaian.java

```
package pbo;

/**
 *
 * @author Nila
 */
public class AlmariPakaian extends Almari implements
Discountable{
    int jmlPintu;
    float diskon;
    public void discount(int harga){
        diskon=0.15f*harga;
    }
    void cetak(){
        System.out.println("Harga          : "+harga);
        System.out.println("Bahan          : "+bahan);
        System.out.println("Jumlah Pintu   : "+jmlPintu);
        System.out.println("Roda          : "+roda);
        System.out.println("Diskon        : "+diskon);
        System.out.println("Bayar         : "+(harga-diskon));
    }
}
```

Class MebelDemo.java

```
package pbo;
/**
 *
 * @author Nila
 */
public class MebelDemo {
    public static void main(String[] args) {

        System.out.println("=====");
        System.out.println("=====MEJA
TAMU=====");
        MejaTamu mt=new MejaTamu();
        mt.harga=5000000;
        mt.bahan="Jati Tua";
        mt.jmlKaki=5;
        mt.bentukKaca="Oval";
        mt.discount( mt.harga);
        mt.cetak();

        System.out.println("=====");
        System.out.println("=====MEJA
MAKAN=====");
        MejaMakan mm = new MejaMakan();
        mm.harga = 5000000;
        mm.bahan = "Jati";
        mm.jmlKaki = 4;
        mm.jmlKursi = 6;
        mm.cetak();
        System.out.println("=====");
        System.out.println("=====ALMARI PAKAIAN=====");
        AlmariPakaian ap=new AlmariPakaian();
        ap.harga=2500000;
        ap.bahan="Stainless";
        ap.roda=false;
        ap.jmlPintu=4;
        ap.discount( ap.harga);
        ap.cetak();
        System.out.println("=====");
        System.out.println("=====ALMARI MAKAN=====");
        AlmariMakan am=new AlmariMakan();
        am.harga=1000000;
        am.bahan="Stainless";
        am.roda=false;
        am.jmlRoda=8;
        am.discount( ap.harga);
        am.cetak();
    }
}
```