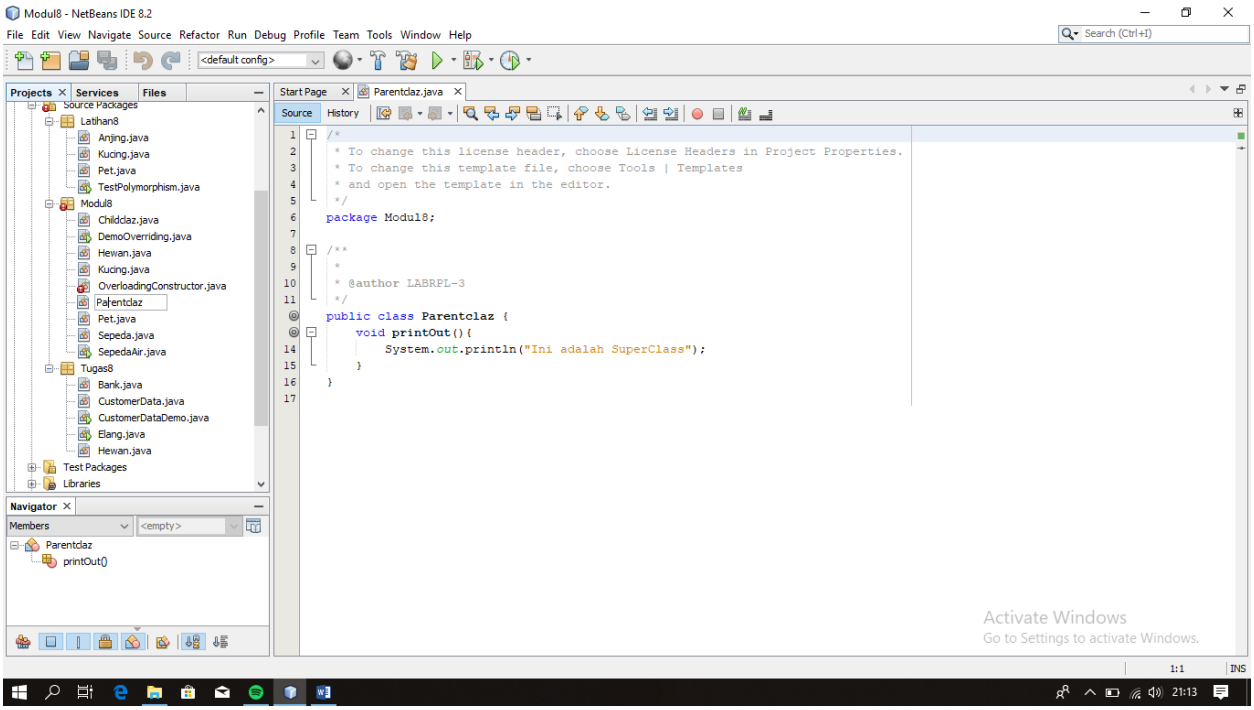
Arindita Prihastama
L200180058
Kelas B

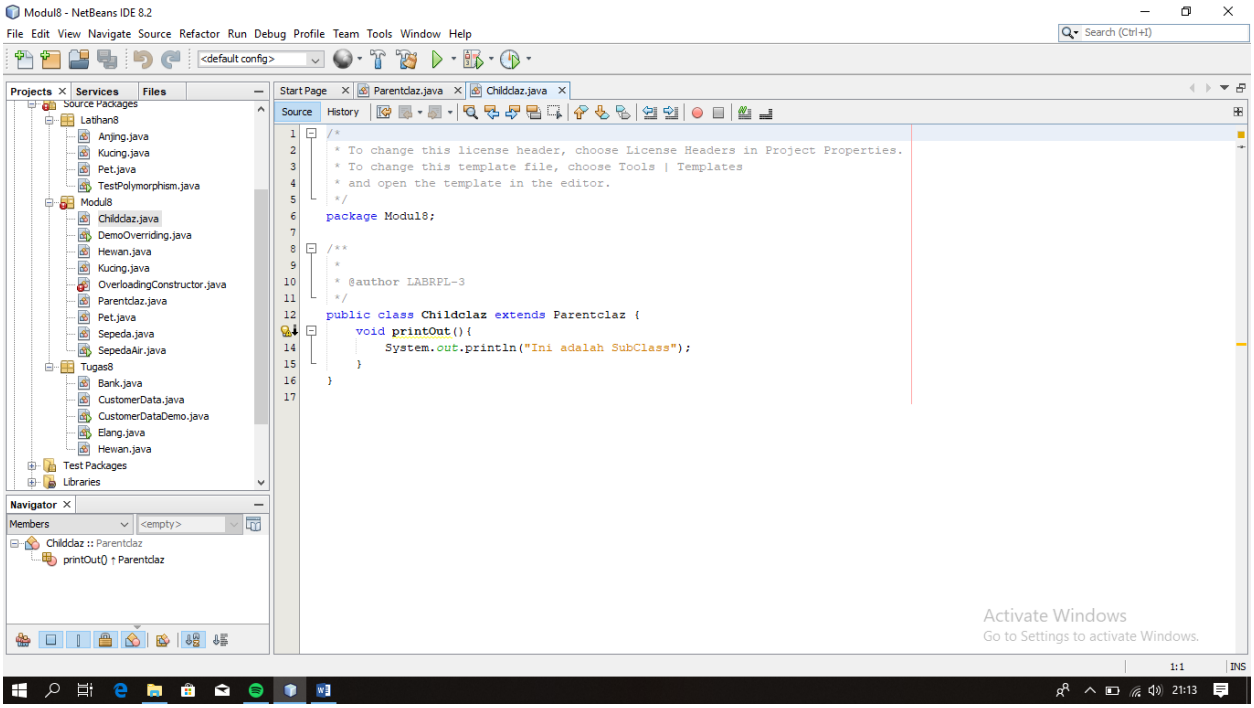
Modul 8

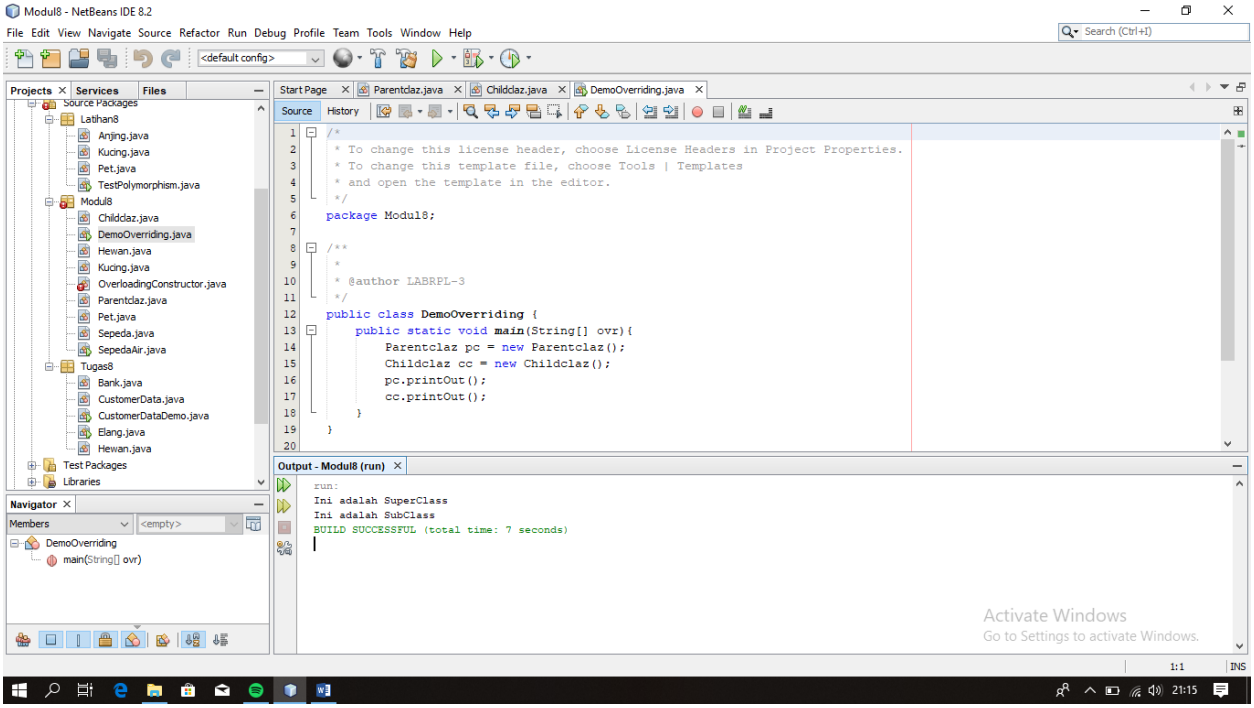
-Polymorphism-

8.1. Runtime Polymorphism

8.1.1. Overriding




Modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
<default config>
Projects Services Files
Source Packages
Latihan8
Anjing.java
Kucing.java
Pet.java
TestPolymorphism.java
Modul8
Childclaz.java
DemoOverriding.java
Hewan.java
Kucing.java
OverloadingConstructor.java
Parentclaz.java
Pet.java
Sepeda.java
SepedaAir.java
Tugas8
Bank.java
CustomerData.java
CustomerDataDemo.java
Elang.java
Hewan.java
Test Packages
Libraries
Navigator
Members
<empty>
Childclaz :: Parentclaz
printOut() ↑ Parentclaz
Start Page
Parentclaz.java
Childclaz.java
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.
*/
package Modul8;
/**
*
* @author LABRPL-3
*/
public class Childclaz extends Parentclaz {
void printOut(){
System.out.println("Ini adalah SubClass");
}
}
Activate Windows
Go to Settings to activate Windows.
1:1
INS
21:13


Modul8 - NetBeans IDE 8.2
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<default config>
Projects Services Files
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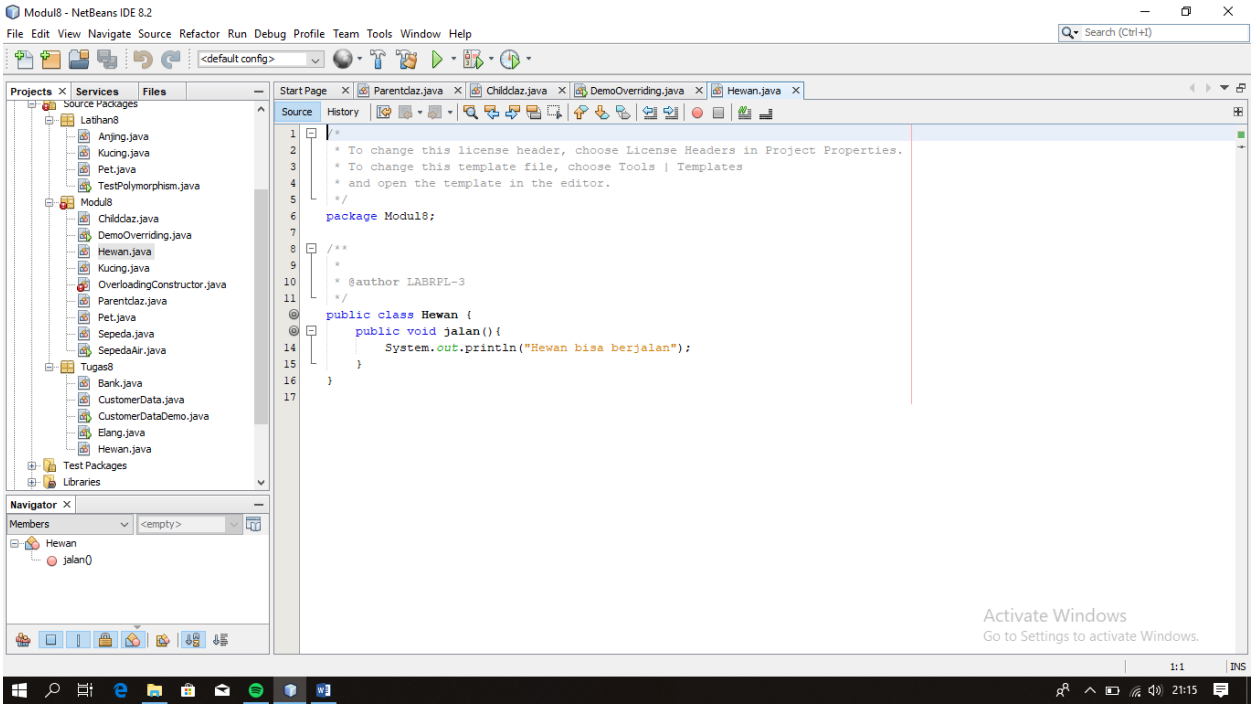
Hewan.java
Kucing.java
OverloadingConstructor.java
Parentclaz.java
Pet.java
Sepeda.java
SepedaAir.java
Tugas8
Bank.java
CustomerData.java
CustomerDataDemo.java
Elang.java
Hewan.java
Test Packages
Libraries
Navigator
Members
<empty>
DemoOverriding
main(String[] ovr)
Start Page
Parentclaz.java
Childclaz.java
DemoOverriding.java
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.
*/
package Modul8;
/**
*
* @author LABRPL-3
*/
public class DemoOverriding {
public static void main(String[] ovr){
Parentclaz pc = new Parentclaz();
Childclaz cc = new Childclaz();
pc.printOut();
cc.printOut();
}
}
Output - Modul8 (run)
run:
Ini adalah SuperClass
Ini adalah SubClass
BUILD SUCCESSFUL (total time: 7 seconds)
Activate Windows
Go to Settings to activate Windows.
1:1
INS
21:15


Modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
<default config>
Projects Services Files
Source Packages
Latihan8
Anjing.java
Kucing.java
Pet.java
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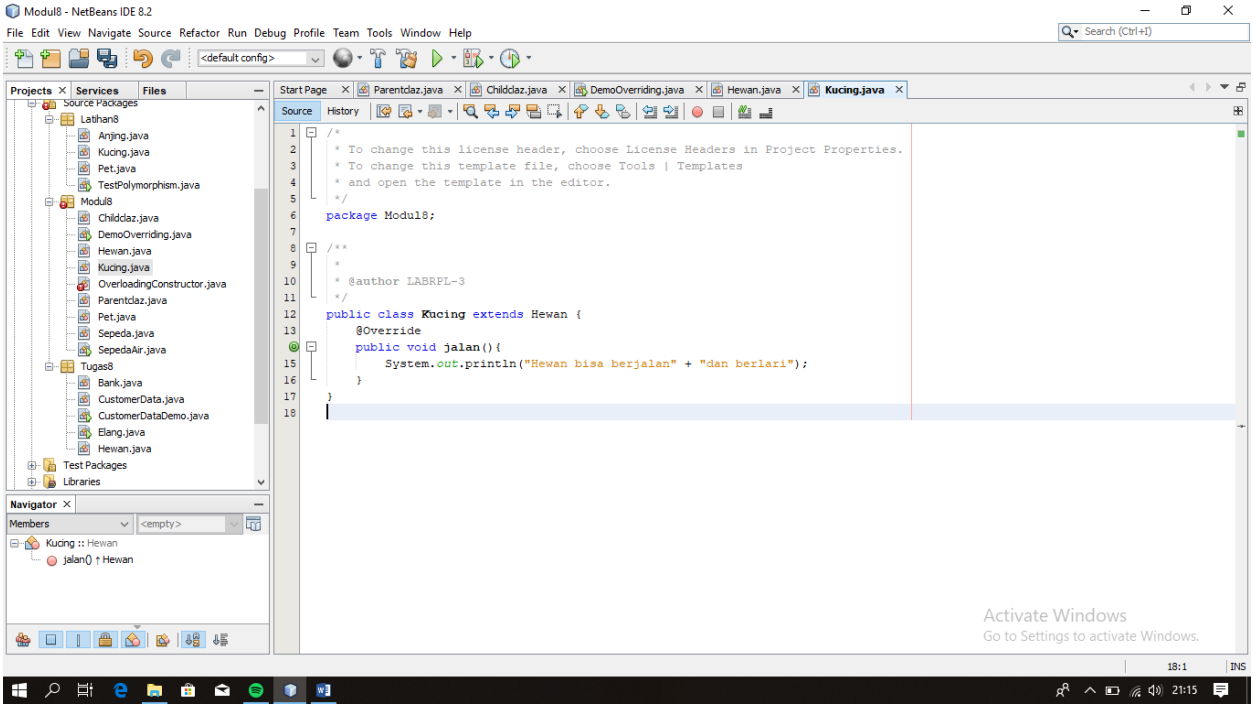
Childclaz.java
DemoOverriding.java
Hewan.java
Kucing.java
OverloadingConstructor.java
Parentclaz.java
Pet.java
Sepeda.java
SepedaAir.java
Tugas8
Bank.java
CustomerData.java
CustomerDataDemo.java
Elang.java
Hewan.java
Test Packages
Libraries
Navigator
Members
<empty>
Hewan
jalan()
Start Page
Parentclaz.java
Childclaz.java
DemoOverriding.java
Hewan.java
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.
*/
package Modul8;
/**
*
* @author LABRPL-3
*/
public class Hewan {
public void jalan(){
System.out.println("Hewan bisa berjalan");
}
}
Activate Windows
Go to Settings to activate Windows.
1:1
INS
21:15


Modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
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<default config>
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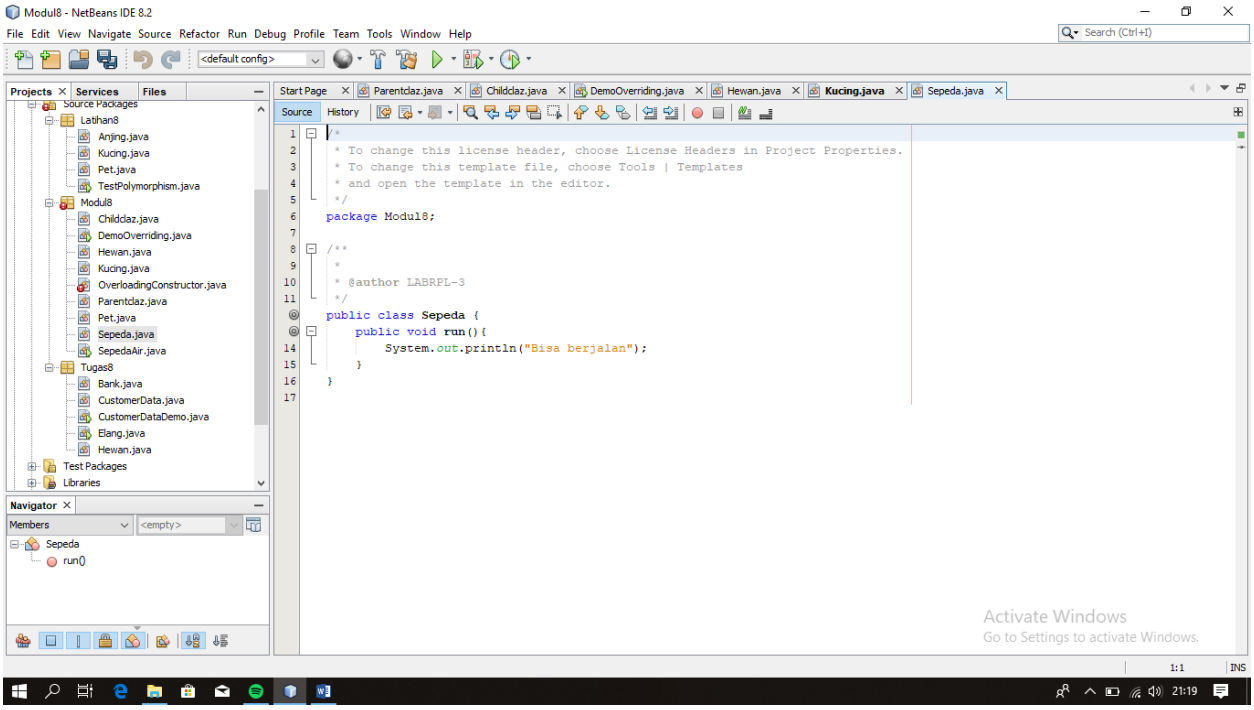
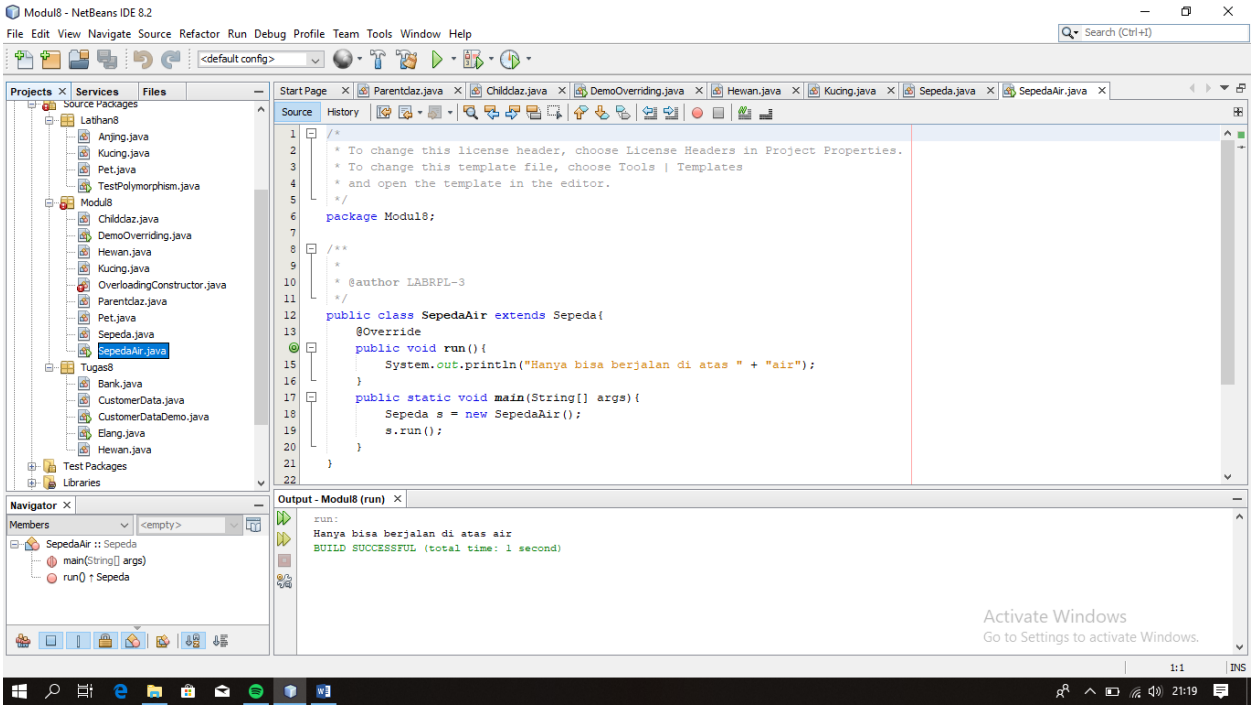
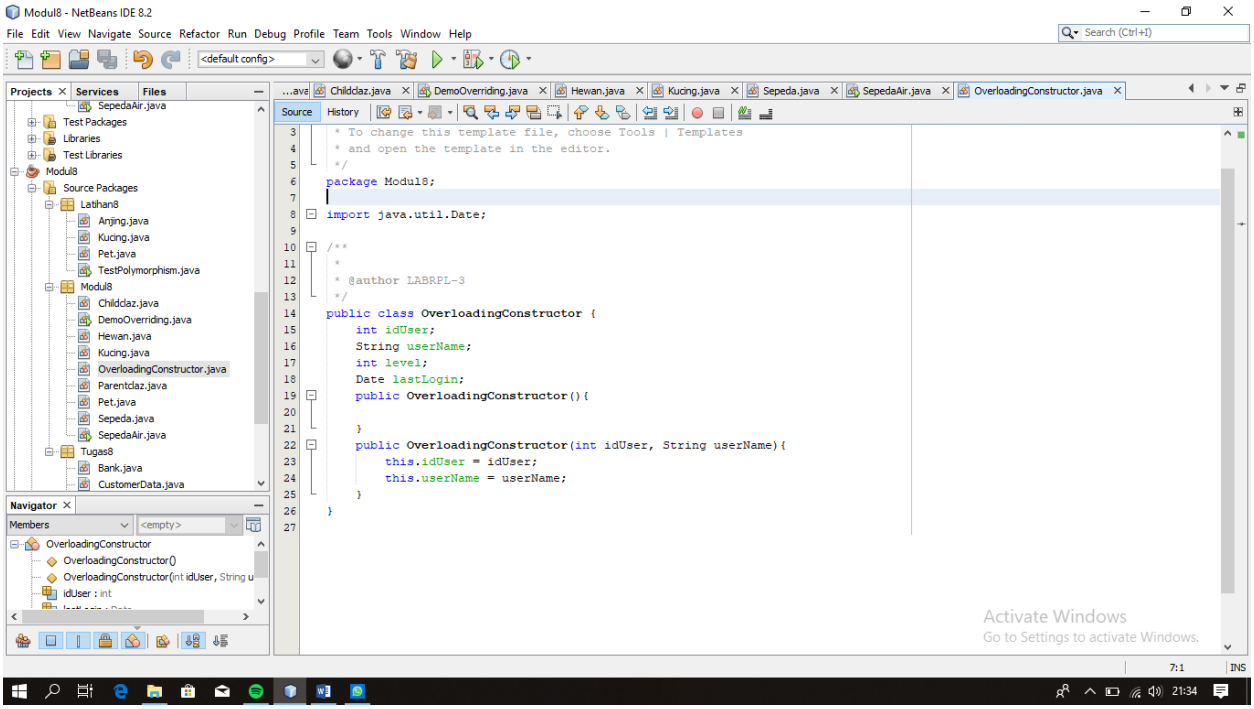
Hewan.java
Kucing.java
OverloadingConstructor.java
Parentclaz.java
Pet.java
Sepeda.java
SepedaAir.java
Tugas8
Bank.java
CustomerData.java
CustomerDataDemo.java
Elang.java
Hewan.java
Test Packages
Libraries
Navigator
Members
<empty>
Kucing :: Hewan
jalan() ↑ Hewan
Start Page
Parentclaz.java
Childclaz.java
DemoOverriding.java
Hewan.java
Kucing.java
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.
*/
package Modul8;
/**
*
* @author LABRPL-3
*/
public class Kucing extends Hewan {
@Override
public void jalan(){
System.out.println("Hewan bisa berjalan" + "dan berlari");
}
}
Activate Windows
Go to Settings to activate Windows.
18:1
INS
21:15

8.1.2. Upcasting

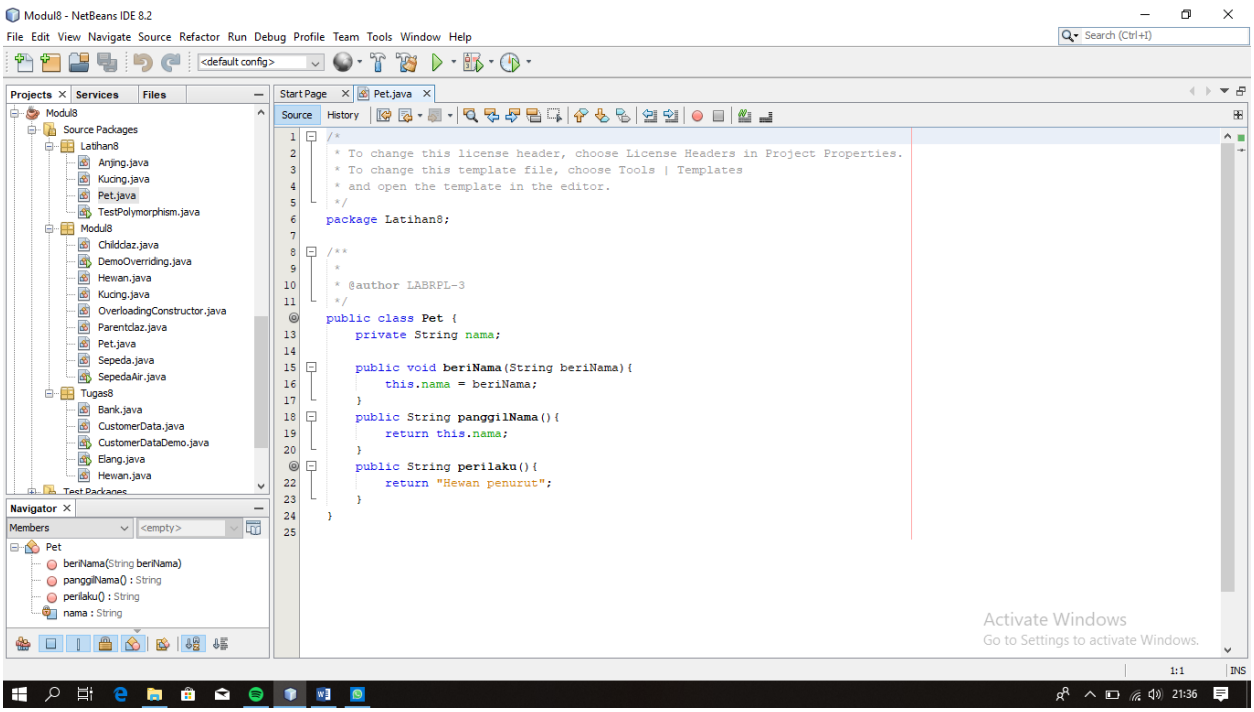


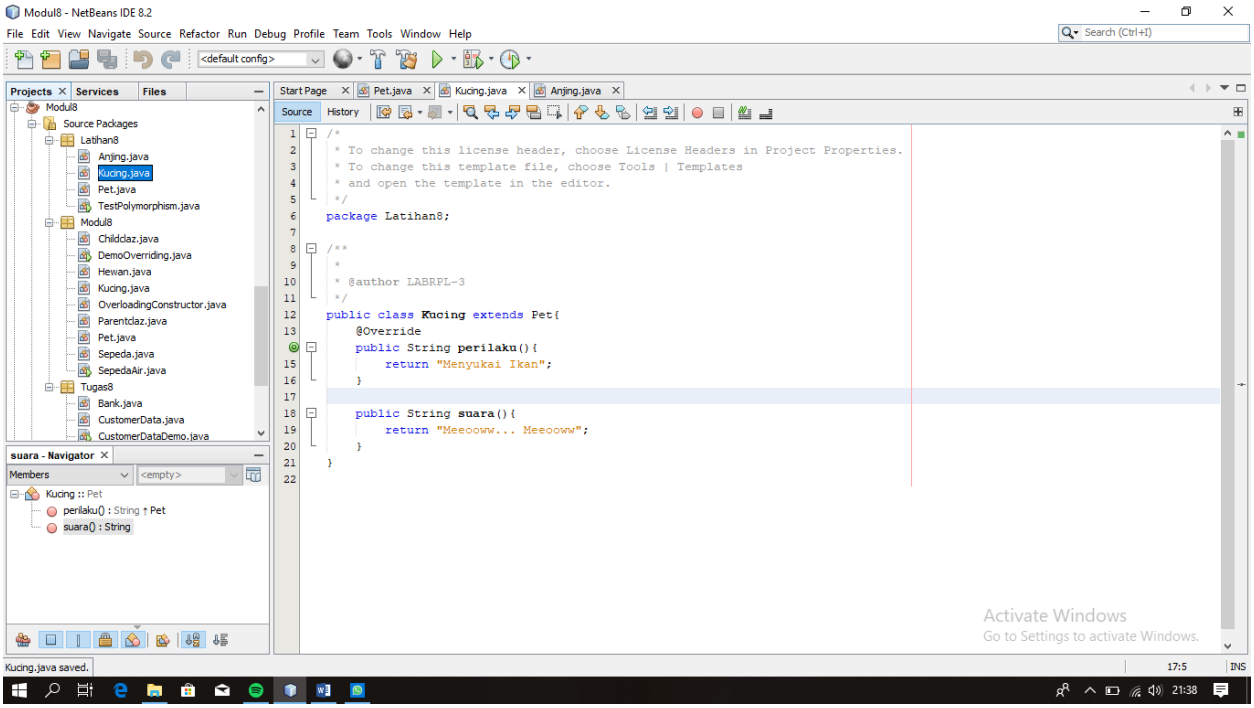


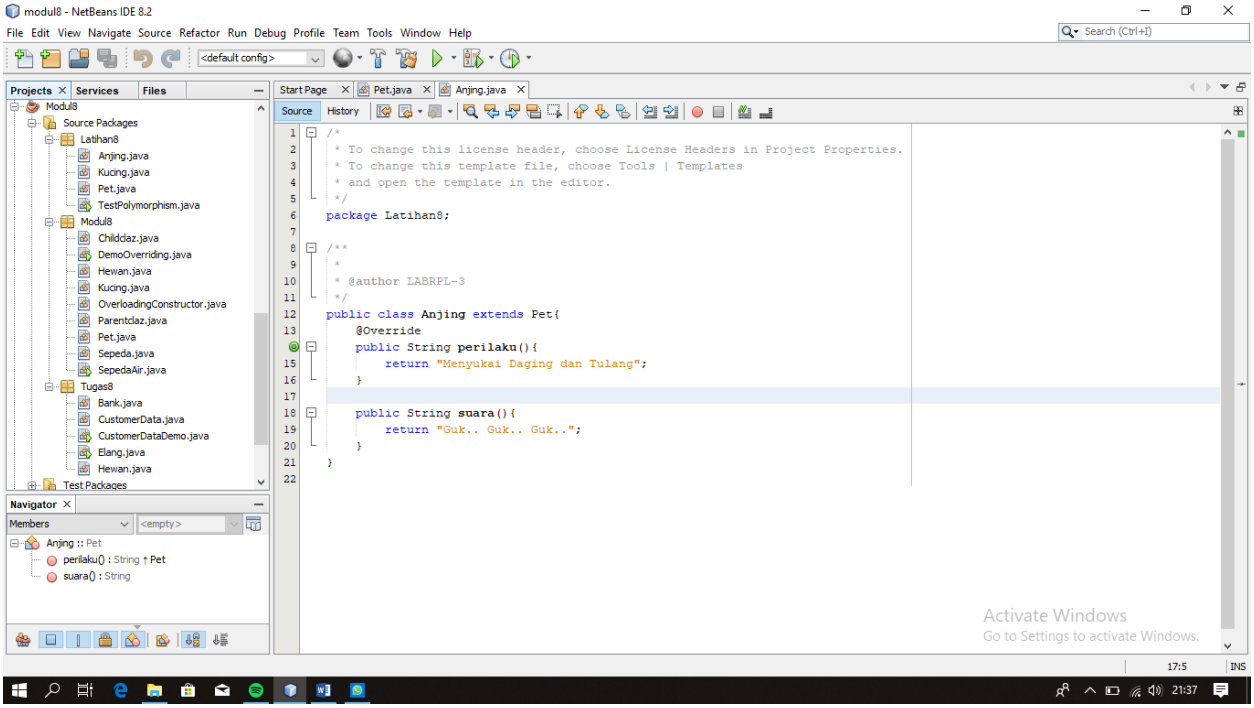
8.1.3. Overloading



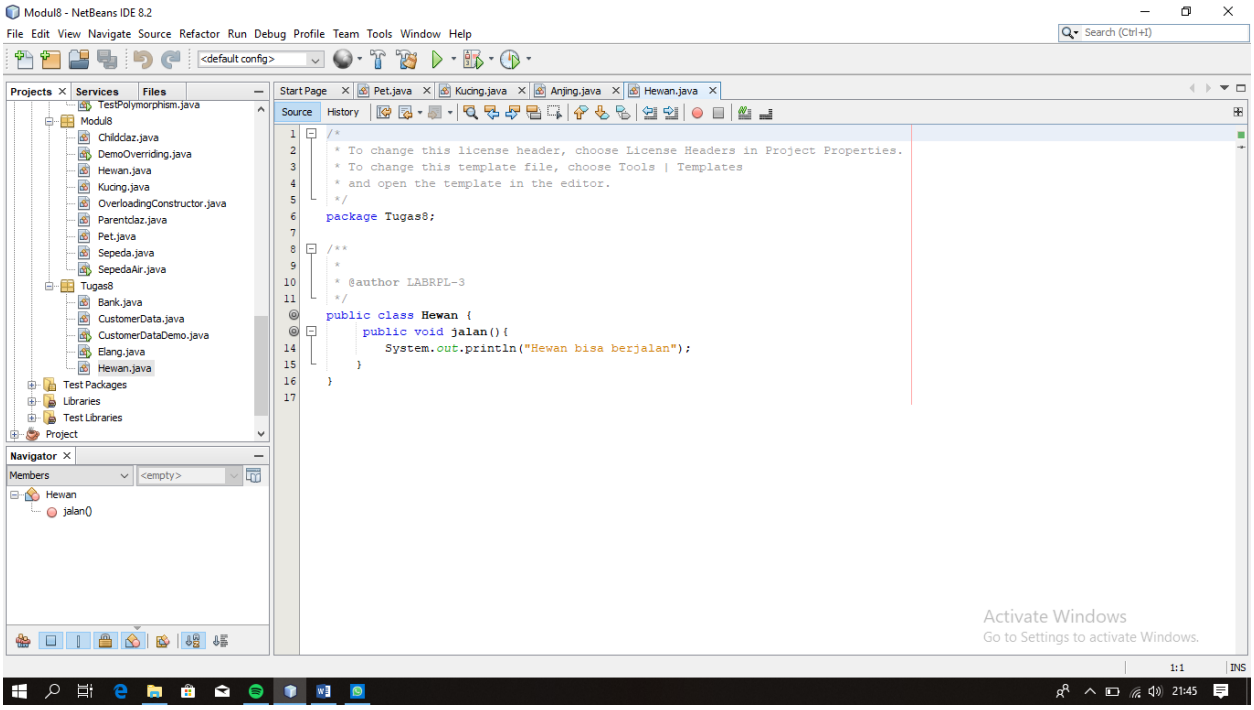
8.2. Latihan

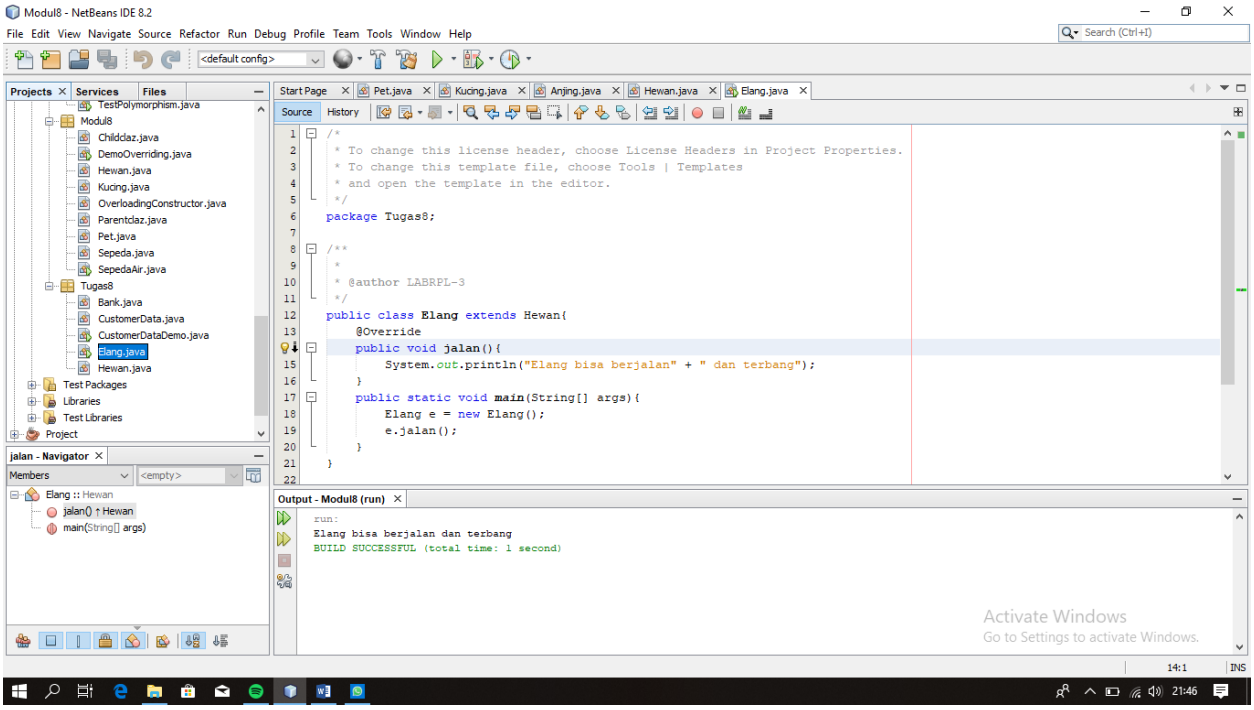


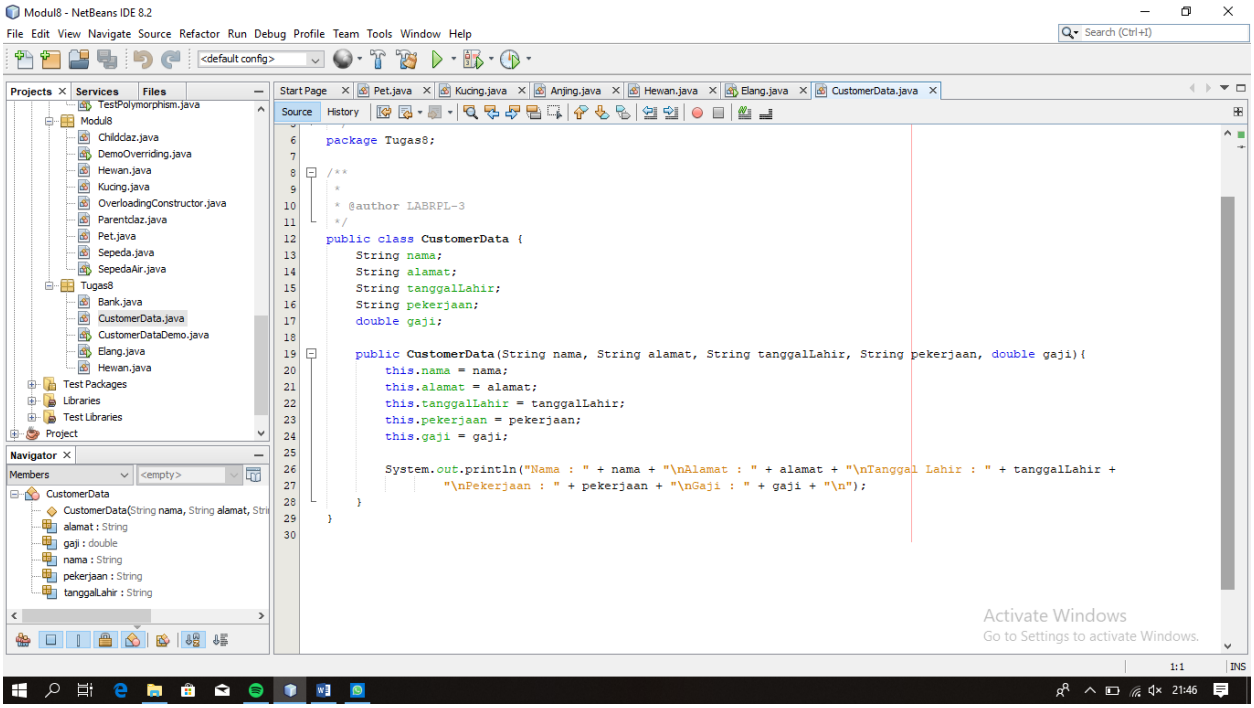

Modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
<default config>
Projects Services Files
Modul8
Source Packages
Latihan8
Anjing.java
Kucing.java
Pet.java
TestPolymorphism.java
Modul8
Childclaz.java
DemoOverriding.java
Hewan.java
Kucing.java
OverloadingConstructor.java
Parentclaz.java
Pet.java
Sepeda.java
SepedaAir.java
Tugas8
Bank.java
CustomerData.java
CustomerDataDemo.java
suara - Navigator
Members
<empty>
Kucing :: Pet
perilaku() : String ↑ Pet
suara() : String
Start Page
Pet.java
Kucing.java
Anjing.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 Latihan8;
7
8 /**
9 *
10 * @author LABRPL-3
11 */
12 public class Kucing extends Pet{
13 @Override
15 public String perilaku(){
15 return "Menyukai Ikan";
16 }
17
18 public String suara(){
19 return "Meeooww... Meeooww";
20 }
21 }
22
Activate Windows
Go to Settings to activate Windows.
Kucing.java saved.
17:5
INS
21:38


modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
<default config>
Projects Services Files
Modul8
Source Packages
Latihan8
Anjing.java
Kucing.java
Pet.java
TestPolymorphism.java
Modul8
Childclaz.java
DemoOverriding.java
Hewan.java
Kucing.java
OverloadingConstructor.java
Parentclaz.java
Pet.java
Sepeda.java
SepedaAir.java
Tugas8
Bank.java
CustomerData.java
CustomerDataDemo.java
Elang.java
Hewan.java
Test Packages
Navigator
Members
<empty>
Anjing :: Pet
perilaku() : String ↑ Pet
suara() : String
Start Page
Pet.java
Anjing.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 Latihan8;
7
8 /**
9 *
10 * @author LABRPL-3
11 */
12 public class Anjing extends Pet{
13 @Override
15 public String perilaku(){
15 return "Menyukai Daging dan Tulang";
16 }
17
18 public String suara(){
19 return "Guk.. Guk.. Guk..";
20 }
21 }
22
Activate Windows
Go to Settings to activate Windows.
17:5
INS
21:37

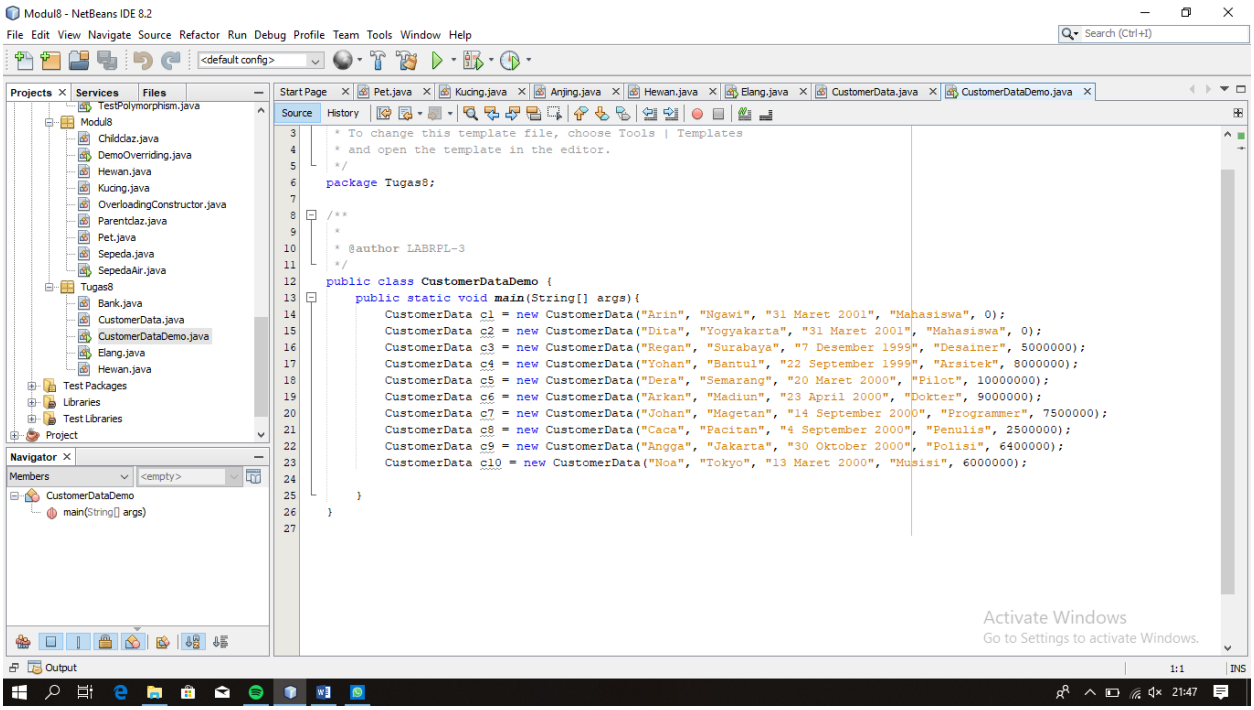
8.3. Tugas


Modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
Projects Services Files
Start Page Pet.java Kucing.java Anjing.java Hewan.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 Tugas8;
7
8 /**
9 *
10 * @author LABRPL-3
11 */
12 public class Hewan {
13 public void jalan(){
14 System.out.println("Hewan bisa berjalan");
15 }
16 }
17
Navigator
Members
Hewan
jalan()
Activate Windows
Go to Settings to activate Windows.
1:1
INS
21:45

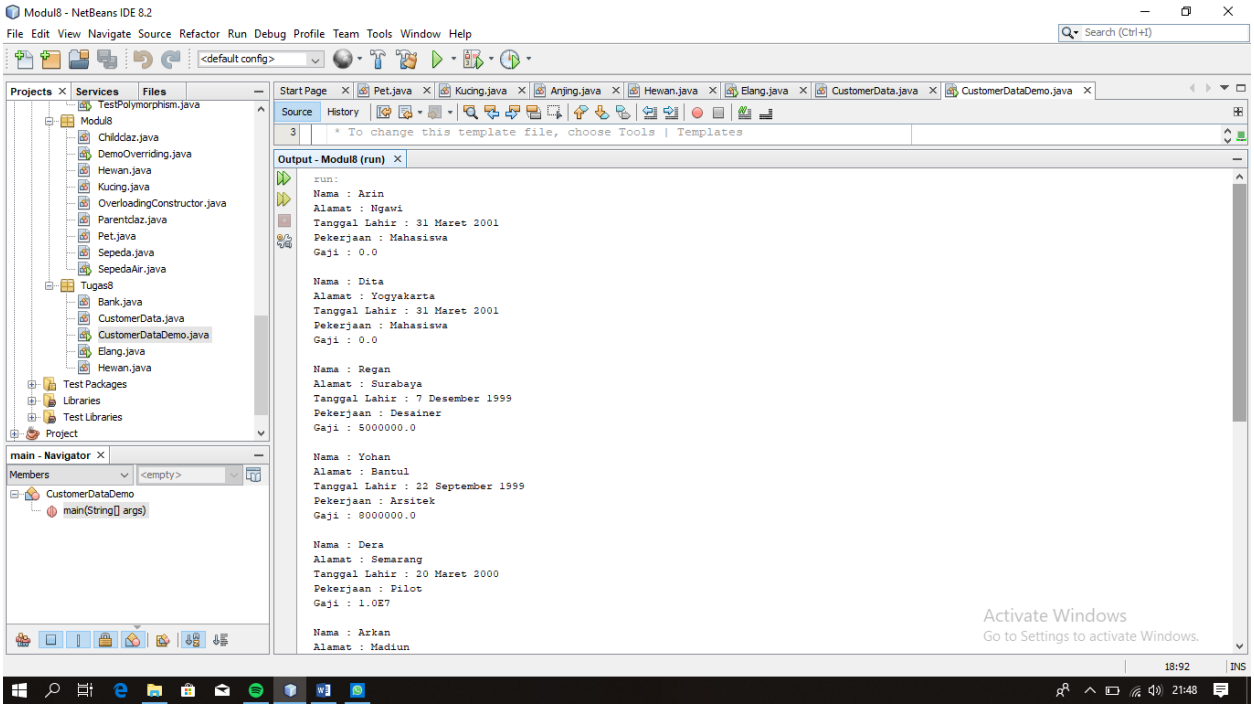

Modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
Projects Services Files
Start Page Pet.java Kucing.java Anjing.java Hewan.java Elang.java
Source History
1 /*
2 * To change this license header, choose License Headers in Project Properties.
3 * To change this template file, choose Tools | Templates
4 * and open the template in the editor.
5 */
6 package Tugas8;
7
8 /**
9 *
10 * @author LABRPL-3
11 */
12 public class Elang extends Hewan{
13 @Override
14 public void jalan(){
15 System.out.println("Elang bisa berjalan" + " dan terbang");
16 }
17 public static void main(String[] args){
18 Elang e = new Elang();
19 e.jalan();
20 }
21 }
22
jalan - Navigator
Members
Elang :: Hewan
jalan() ↑ Hewan
main(String[] args)
Output - Modul8 (run)
run:
Elang bisa berjalan dan terbang
BUILD SUCCESSFUL (total time: 1 second)
Activate Windows
Go to Settings to activate Windows.
14:1
INS
21:46

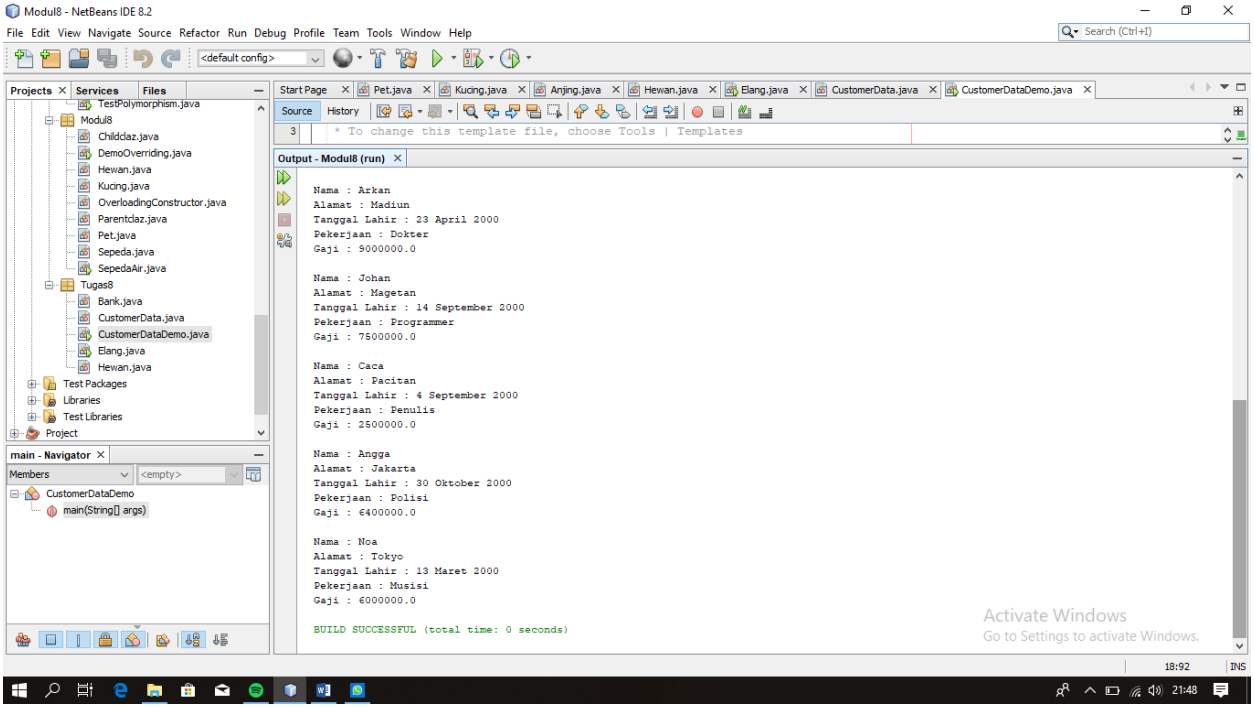


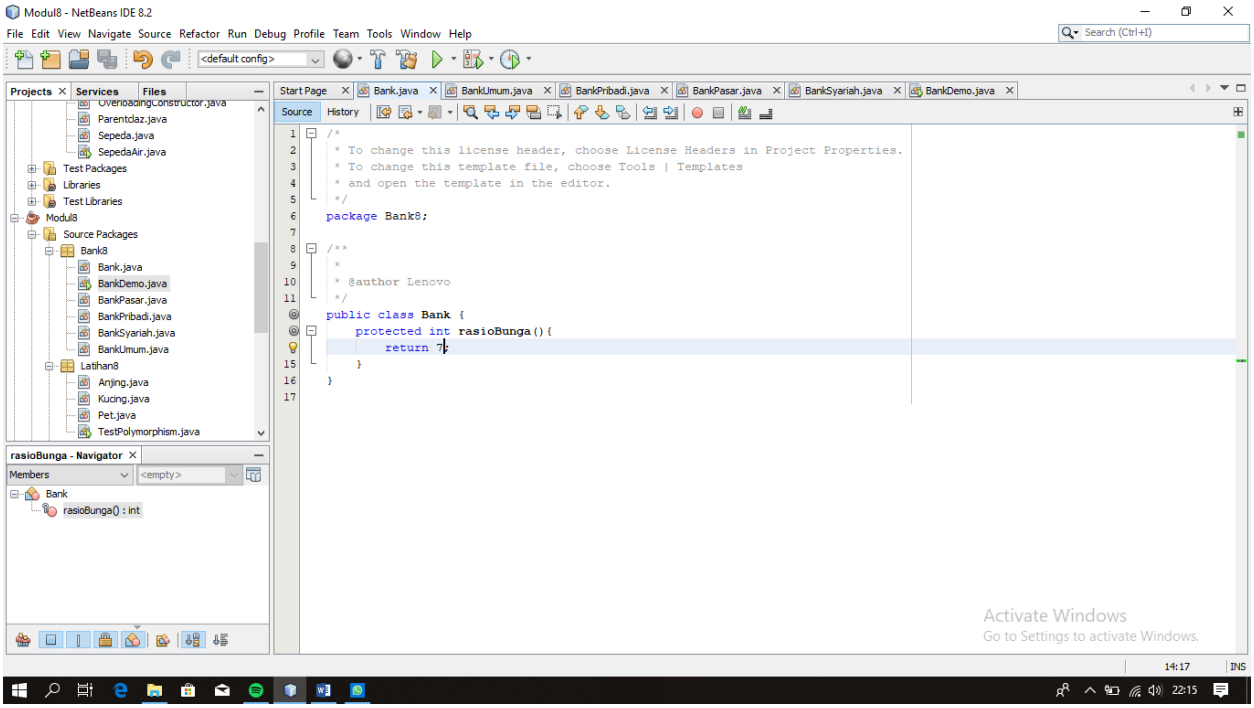
```
package Tugas8;

/**
 *
 * @author LABRPL-3
 */
public class CustomerData {
    String nama;
    String alamat;
    String tanggalLahir;
    String pekerjaan;
    double gaji;

    public CustomerData(String nama, String alamat, String tanggalLahir, String pekerjaan, double gaji){
        this.nama = nama;
        this.alamat = alamat;
        this.tanggalLahir = tanggalLahir;
        this.pekerjaan = pekerjaan;
        this.gaji = gaji;

        System.out.println("Nama : " + nama + "\nAlamat : " + alamat + "\nTanggal Lahir : " + tanggalLahir +
                "\nPekerjaan : " + pekerjaan + "\nGaji : " + gaji + "\n");
    }
}
```

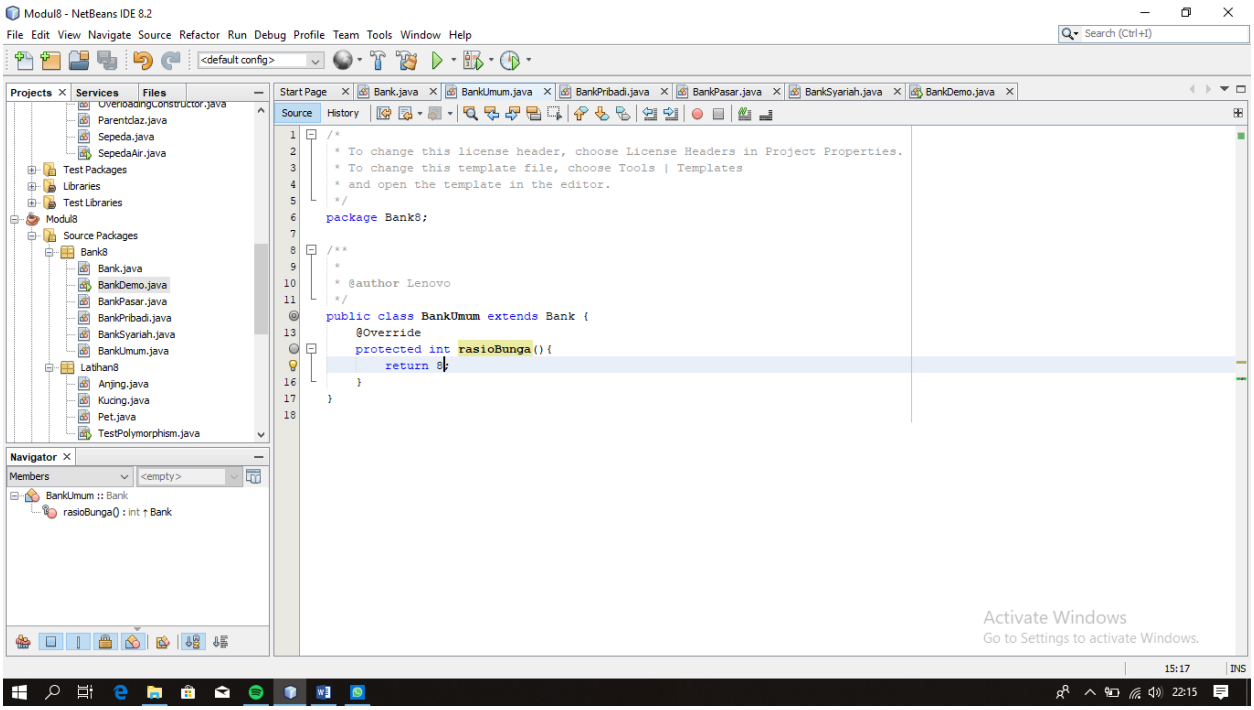


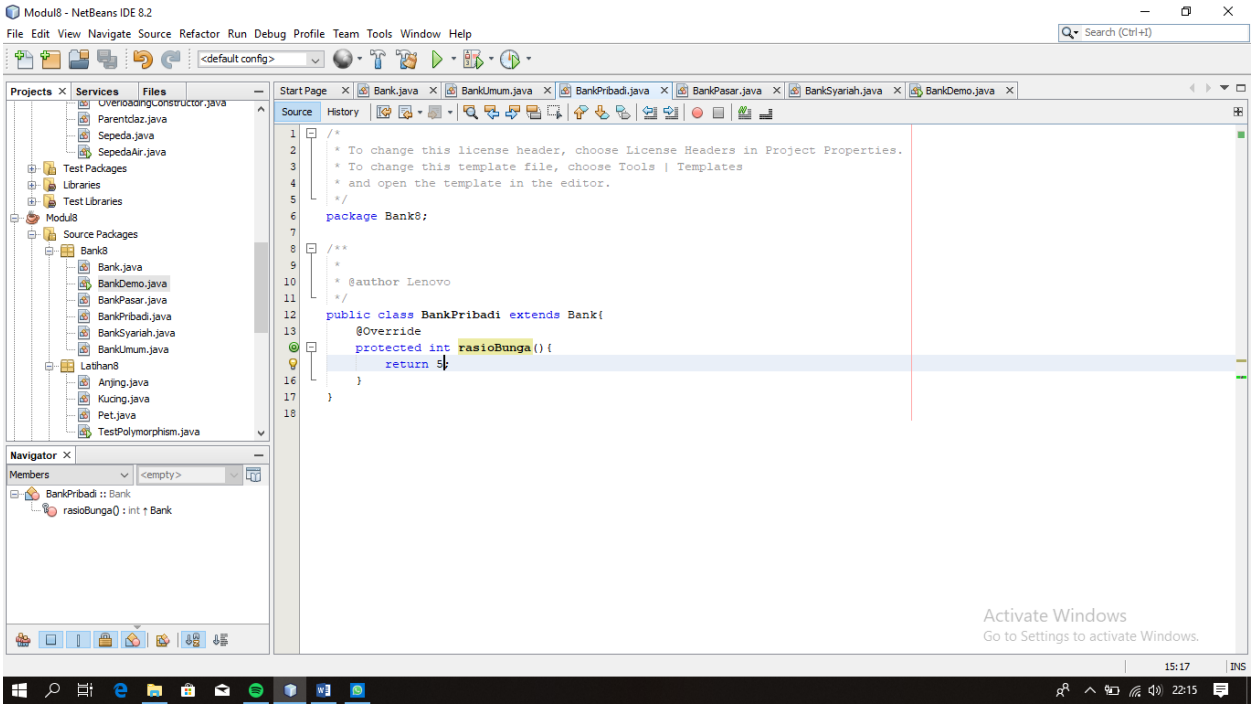
```
/**
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package Tugas8;

/**
 *
 * @author LABRPL-3
 */
public class CustomerDataDemo {
    public static void main(String[] args){
        CustomerData c1 = new CustomerData("Arin", "Ngawi", "31 Maret 2001", "Mahasiswa", 0);
        CustomerData c2 = new CustomerData("Dita", "Yogyakarta", "31 Maret 2001", "Mahasiswa", 0);
        CustomerData c3 = new CustomerData("Regan", "Surabaya", "7 Desember 1999", "Desainer", 5000000);
        CustomerData c4 = new CustomerData("Yohan", "Bantul", "22 September 1999", "Arsitek", 8000000);
        CustomerData c5 = new CustomerData("Dera", "Semarang", "20 Maret 2000", "Pilot", 10000000);
        CustomerData c6 = new CustomerData("Arkan", "Madiun", "23 April 2000", "Dokter", 9000000);
        CustomerData c7 = new CustomerData("Johan", "Magetan", "14 September 2000", "Programmer", 7500000);
        CustomerData c8 = new CustomerData("Caca", "Pacitan", "4 September 2000", "Penulis", 2500000);
        CustomerData c9 = new CustomerData("Angga", "Jakarta", "30 Oktober 2000", "Polisi", 6400000);
        CustomerData c10 = new CustomerData("Noa", "Tokyo", "13 Maret 2000", "Musisi", 6000000);

    }
}
```


Modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
<default config>
Projects Services Files
TestPolymorphism.java
Modul8
Childclaz.java
DemoOverriding.java
Hewan.java
Kucing.java
OverloadingConstructor.java
Parentclaz.java
Pet.java
Sepeda.java
SepedaAir.java
Tugas8
Bank.java
CustomerData.java
CustomerDataDemo.java
Elang.java
Hewan.java
Test Packages
Libraries
Test Libraries
Project
main - Navigator
Members
<empty>
CustomerDataDemo
main(String[] args)
Start Page
Pet.java
Kucing.java
Anjing.java
Hewan.java
Elang.java
CustomerData.java
CustomerDataDemo.java
Source
History
3
* To change this template file, choose Tools | Templates
Output - Modul8 (run)
run:
Nama : Arin
Alamat : Ngawi
Tanggal Lahir : 31 Maret 2001
Pekerjaan : Mahasiswa
Gaji : 0.0
Nama : Dita
Alamat : Yogyakarta
Tanggal Lahir : 31 Maret 2001
Pekerjaan : Mahasiswa
Gaji : 0.0
Nama : Regan
Alamat : Surabaya
Tanggal Lahir : 7 Desember 1999
Pekerjaan : Desainer
Gaji : 5000000.0
Nama : Yohan
Alamat : Bantul
Tanggal Lahir : 22 September 1999
Pekerjaan : Arsitek
Gaji : 8000000.0
Nama : Dera
Alamat : Semarang
Tanggal Lahir : 20 Maret 2000
Pekerjaan : Pilot
Gaji : 1.0E7
Nama : Arkan
Alamat : Madiun
Activate Windows
Go to Settings to activate Windows.
18:92
INS
21:48


Modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
<default config>
Projects Services Files
TestPolymorphism.java
Modul8
Childclaz.java
DemoOverriding.java
Hewan.java
Kucing.java
OverloadingConstructor.java
Parentclaz.java
Pet.java
Sepeda.java
SepedaAir.java
Tugas8
Bank.java
CustomerData.java
CustomerDataDemo.java
Elang.java
Hewan.java
Test Packages
Libraries
Test Libraries
Project
main - Navigator
Members
<empty>
CustomerDataDemo
main(String[] args)
Start Page
Pet.java
Kucing.java
Anjing.java
Hewan.java
Elang.java
CustomerData.java
CustomerDataDemo.java
Source
History
3
* To change this template file, choose Tools | Templates
Output - Modul8 (run)
Nama : Arkan
Alamat : Madiun
Tanggal Lahir : 23 April 2000
Pekerjaan : Dokter
Gaji : 9000000.0
Nama : Johan
Alamat : Magetan
Tanggal Lahir : 14 September 2000
Pekerjaan : Programmer
Gaji : 7500000.0
Nama : Caca
Alamat : Pacitan
Tanggal Lahir : 4 September 2000
Pekerjaan : Penulis
Gaji : 2500000.0
Nama : Angga
Alamat : Jakarta
Tanggal Lahir : 30 Oktober 2000
Pekerjaan : Polisi
Gaji : 6400000.0
Nama : Noa
Alamat : Tokyo
Tanggal Lahir : 13 Maret 2000
Pekerjaan : Musisi
Gaji : 6000000.0
BUILD SUCCESSFUL (total time: 0 seconds)
Activate Windows
Go to Settings to activate Windows.
18:92
INS
21:48


Modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
<default config>
Projects Services Files
Start Page Bank.java BankUmum.java BankPribadi.java BankPasar.java BankSyariah.java BankDemo.java
Source History
Parentclaz.java
Sepeda.java
SepedaAir.java
Test Packages
Libraries
Test Libraries
Modul8
Source Packages
Bank8
Bank.java
BankDemo.java
BankPasar.java
BankPribadi.java
BankSyariah.java
BankUmum.java
Latihan8
Anjing.java
Kucing.java
Pet.java
TestPolymorphism.java
rasioBunga - Navigator
Members
<empty>
Bank
rasioBunga() : int
/*
* 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 Bank8;
/**
*
* @author Lenovo
*/
public class Bank {
protected int rasioBunga(){
return 7;
}
}
Activate Windows
Go to Settings to activate Windows.
14:17
INS
22:15


Modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
<default config>
Projects Services Files
Start Page Bank.java BankUmum.java BankPribadi.java BankPasar.java BankSyariah.java BankDemo.java
Source History
Parentclaz.java
Sepeda.java
SepedaAir.java
Test Packages
Libraries
Test Libraries
Modul8
Source Packages
Bank8
Bank.java
BankDemo.java
BankPasar.java
BankPribadi.java
BankSyariah.java
BankUmum.java
Latihan8
Anjing.java
Kucing.java
Pet.java
TestPolymorphism.java
Navigator
Members
<empty>
BankUmum :: Bank
rasioBunga() : int ↑ Bank
/*
* 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 Bank8;
/**
*
* @author Lenovo
*/
public class BankUmum extends Bank {
@Override
protected int rasioBunga(){
return 8;
}
}
Activate Windows
Go to Settings to activate Windows.
15:17
INS
22:15


Modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
<default config>
Projects Services Files
Start Page Bank.java BankUmum.java BankPribadi.java BankPasar.java BankSyariah.java BankDemo.java
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Sepeda.java
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Libraries
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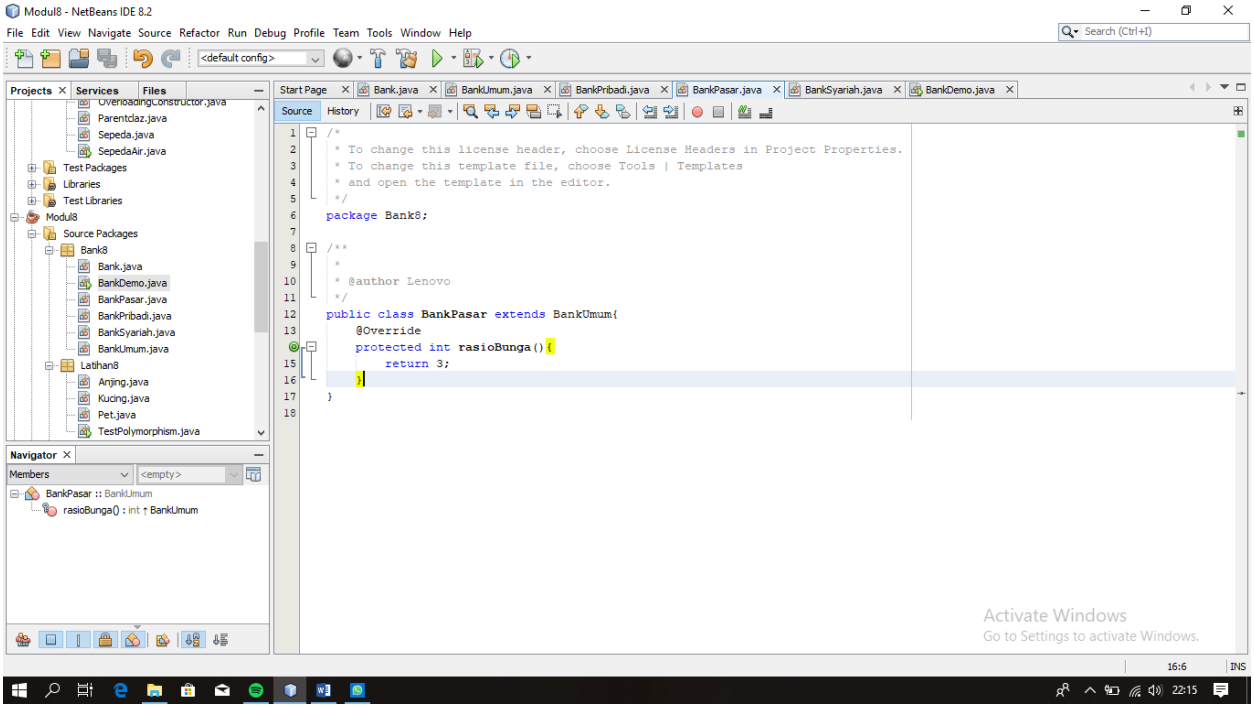
Kucing.java
Pet.java
TestPolymorphism.java
Navigator
Members
<empty>
BankPribadi :: Bank
rasioBunga() : int ↑ Bank
/*
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
*/
package Bank8;
/**
*
* @author Lenovo
*/
public class BankPribadi extends Bank{
@Override
protected int rasioBunga(){
return 5;
}
}
Activate Windows
Go to Settings to activate Windows.
15:17
INS
22:15


Modul8 - NetBeans IDE 8.2
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Parentclaz.java
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Test Packages
Libraries
Test Libraries
Modul8
Source Packages
Bank8
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BankDemo.java
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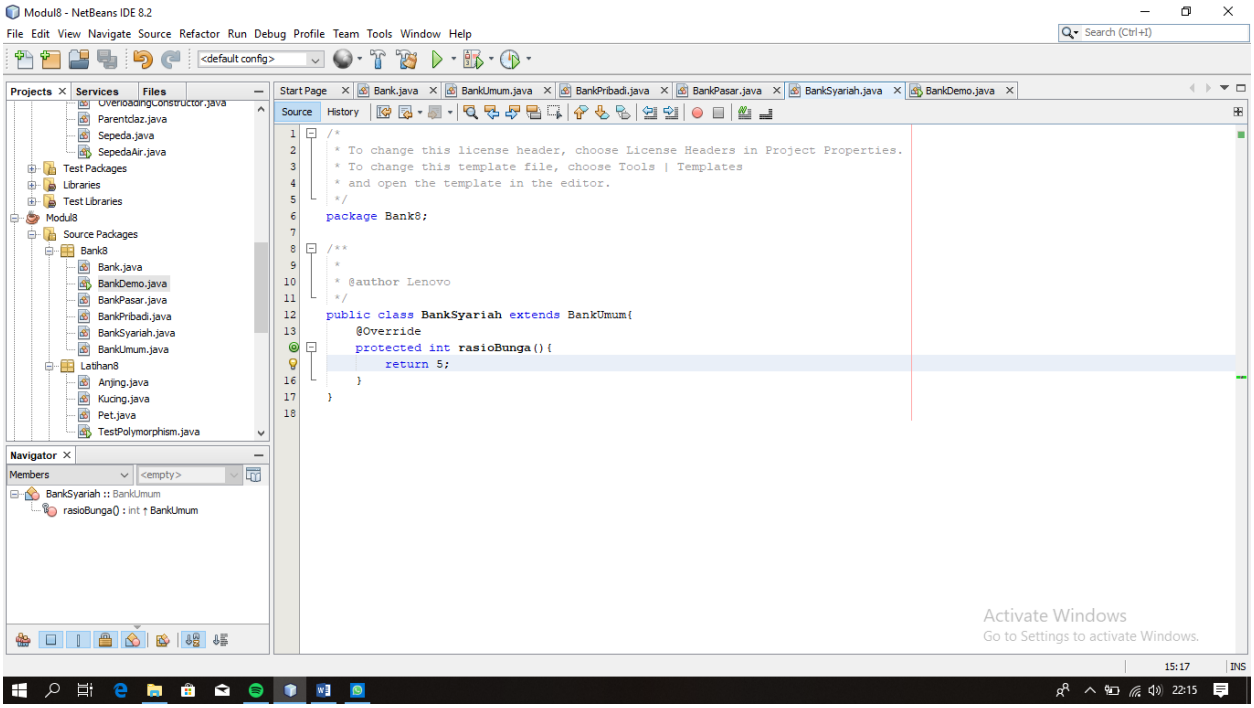
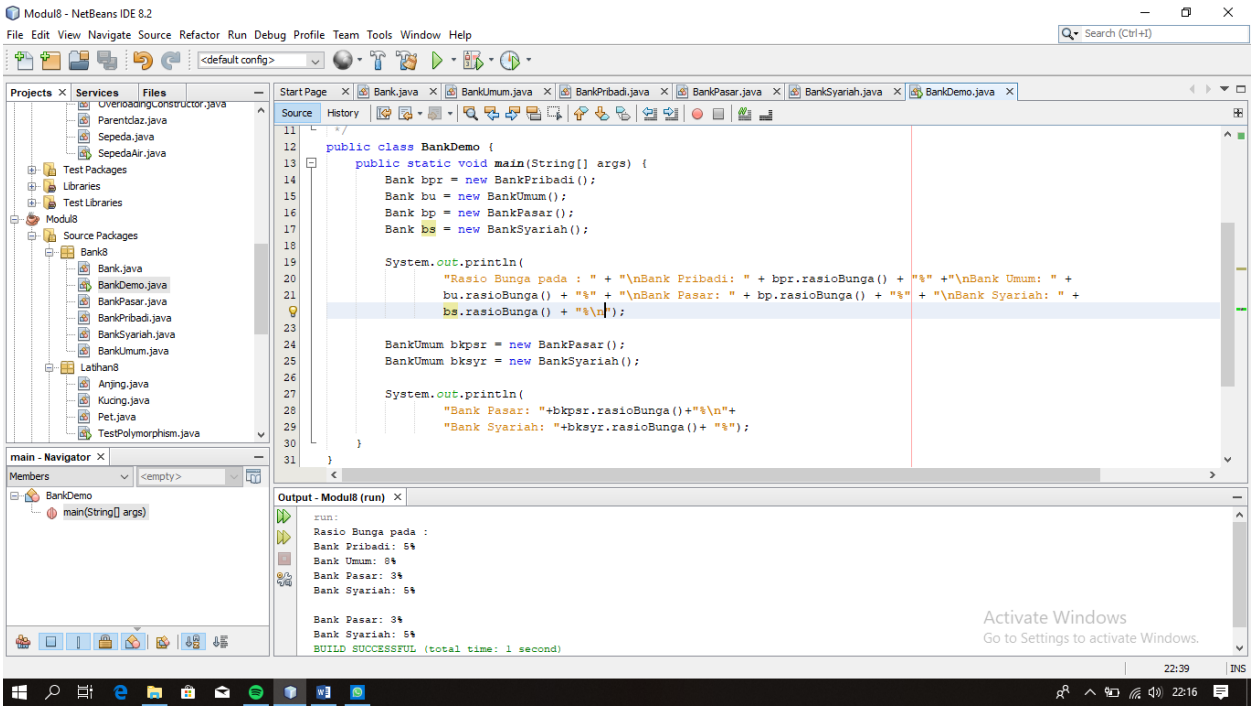
Latihan8
Anjing.java
Kucing.java
Pet.java
TestPolymorphism.java
Navigator
Members
<empty>
BankPasar :: BankUmum
rasioBunga() : int ↑ BankUmum
/*
* To change this license header, choose License Headers in Project Properties.
* To change this template file, choose Tools | Templates
* and open the template in the editor.
*/
package Bank8;
/**
*
* @author Lenovo
*/
public class BankPasar extends BankUmum{
@Override
protected int rasioBunga(){
return 3;
}
}
Activate Windows
Go to Settings to activate Windows.
16:6
INS
22:15


Modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
Projects Services Files
Start Page Bank.java BankUmum.java BankPribadi.java BankPasar.java BankSyariah.java BankDemo.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 Bank8;
7
8 /**
9 *
10 * @author Lenovo
11 */
12 public class BankSyariah extends BankUmum{
13 @Override
14 protected int rasioBunga(){
15 return 5;
16 }
17 }
18
Navigator
Members
BankSyariah :: BankUmum
rasioBunga() : int ↑ BankUmum
Activate Windows
Go to Settings to activate Windows.
15:17
INS
22:15


Modul8 - NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
Projects Services Files
Start Page Bank.java BankUmum.java BankPribadi.java BankPasar.java BankSyariah.java BankDemo.java
Source History
11 */
12 public class BankDemo {
13 public static void main(String[] args) {
14 Bank bpr = new BankPribadi();
15 Bank bu = new BankUmum();
16 Bank bp = new BankPasar();
17 Bank bs = new BankSyariah();
18
19 System.out.println(
20 "Rasio Bunga pada : " + "\nBank Pribadi: " + bpr.rasioBunga() + "%" +"\nBank Umum: " +
21 bu.rasioBunga() + "%" + "\nBank Pasar: " + bp.rasioBunga() + "%" + "\nBank Syariah: " +
22 bs.rasioBunga() + "%\n");
23
24 BankUmum bkpsr = new BankPasar();
25 BankUmum bksyr = new BankSyariah();
26
27 System.out.println(
28 "Bank Pasar: "+bkpsr.rasioBunga()+"%\n"+
29 "Bank Syariah: "+bksyr.rasioBunga()+ "%");
30 }
31 }
main - Navigator
Members
BankDemo
main(String[] args)
Output - Modul8 (run)
run:
Rasio Bunga pada :
Bank Pribadi: 5%
Bank Umum: 8%
Bank Pasar: 3%
Bank Syariah: 5%
Bank Pasar: 3%
Bank Syariah: 5%
BUILD SUCCESSFUL (total time: 1 second)
Activate Windows
Go to Settings to activate Windows.
22:39
INS
22:16