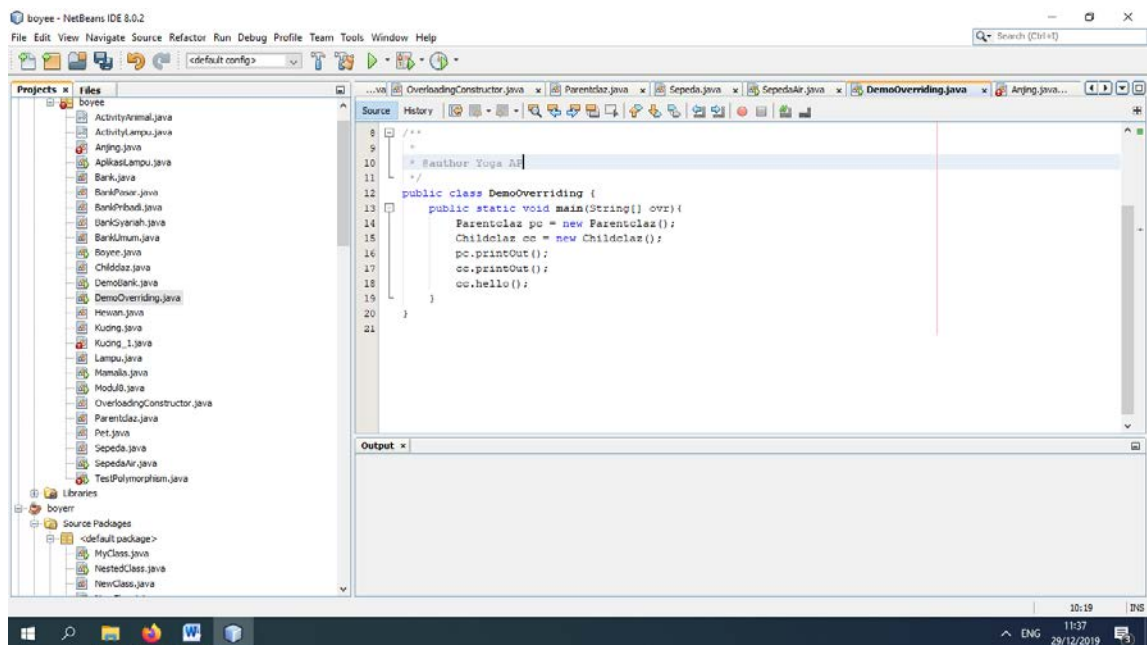
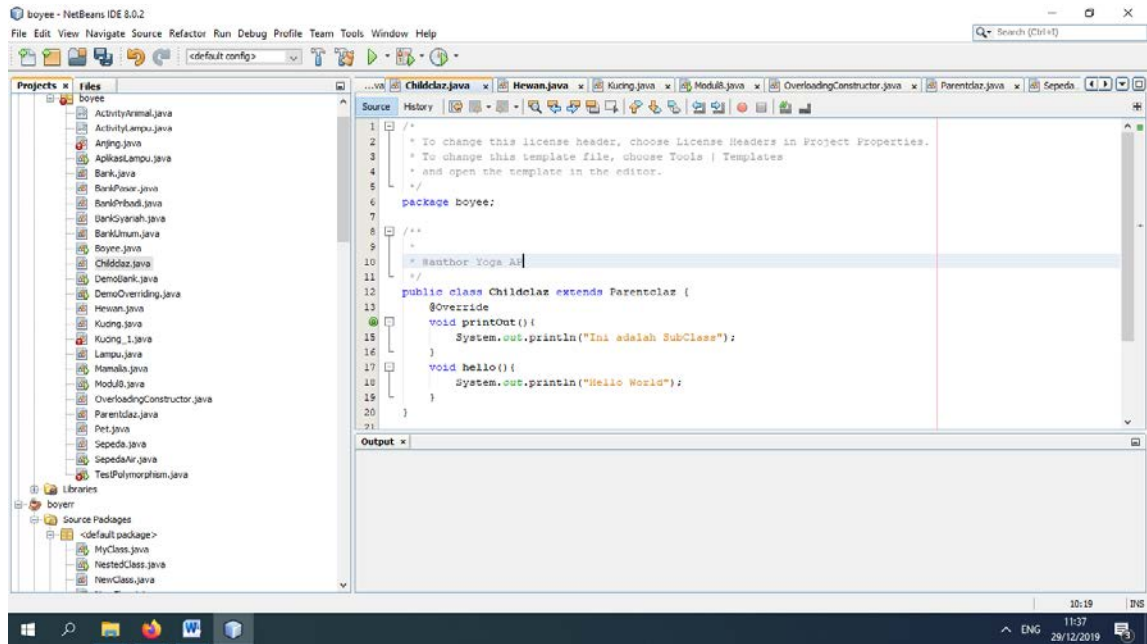
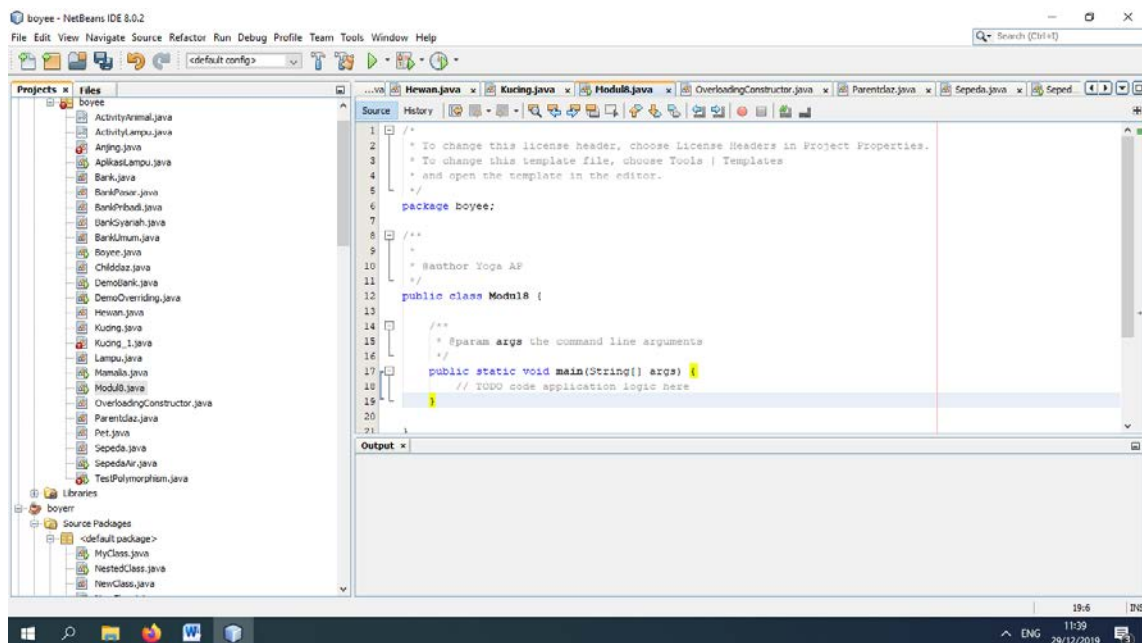
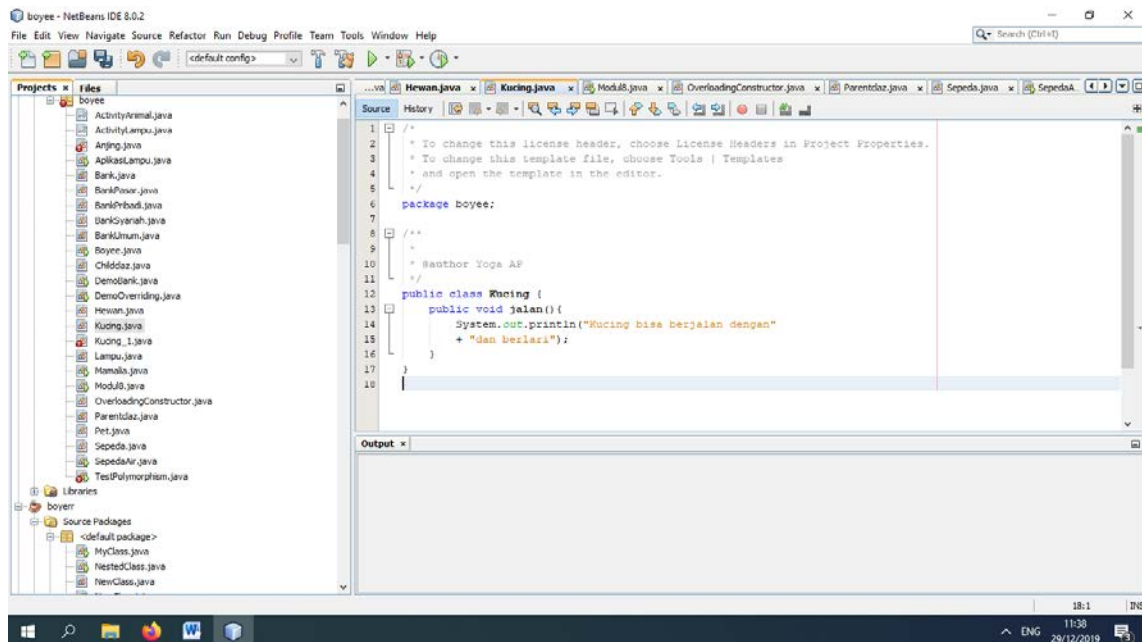
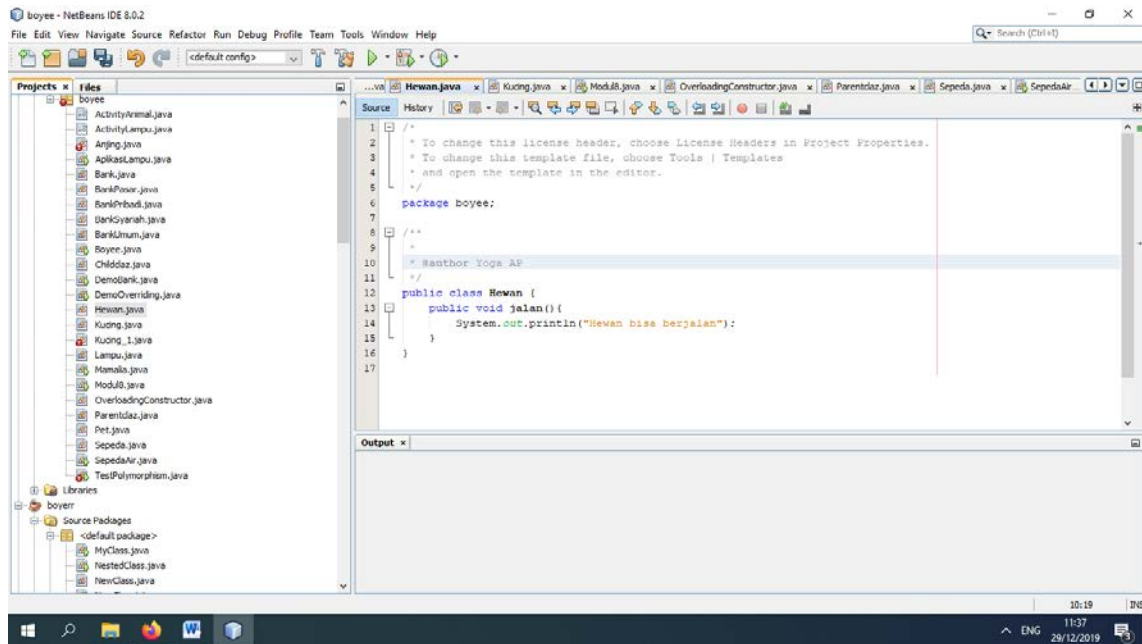
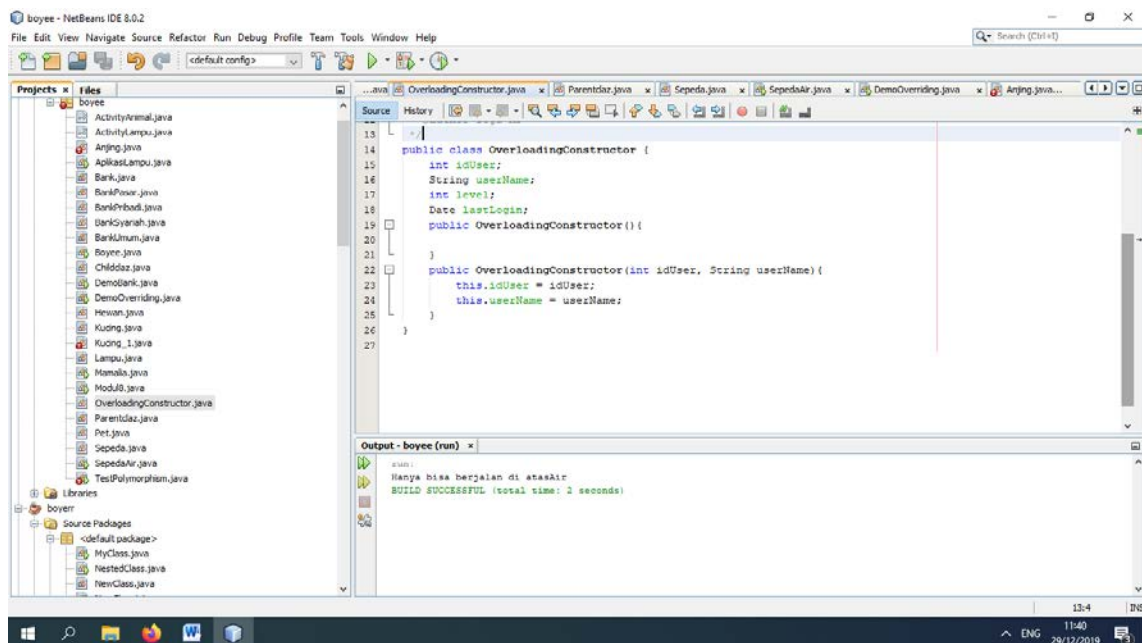
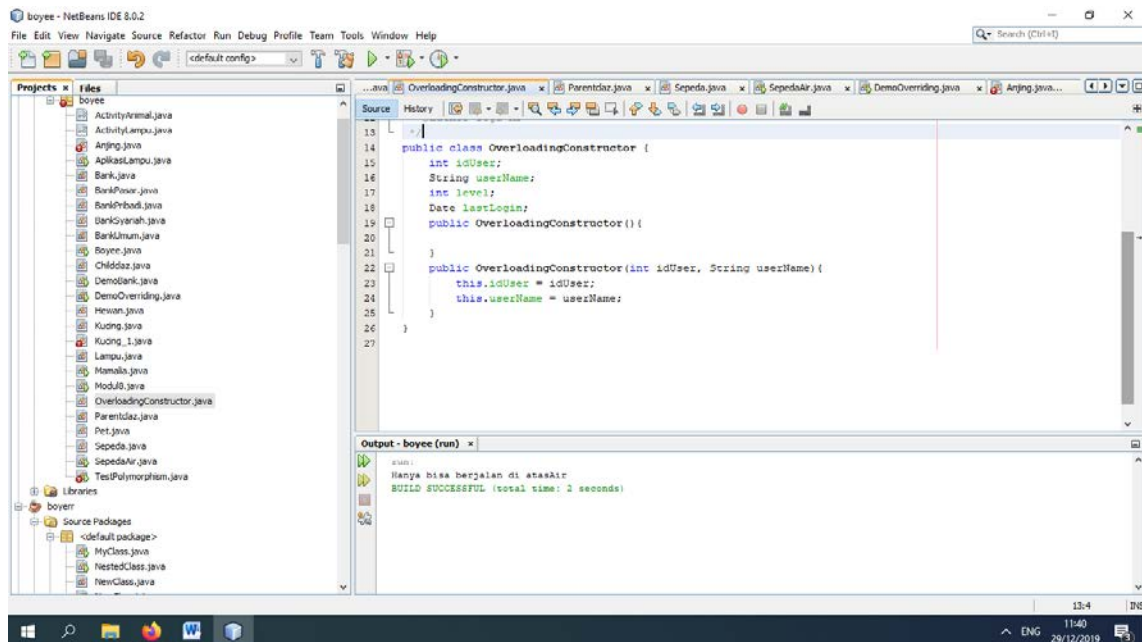
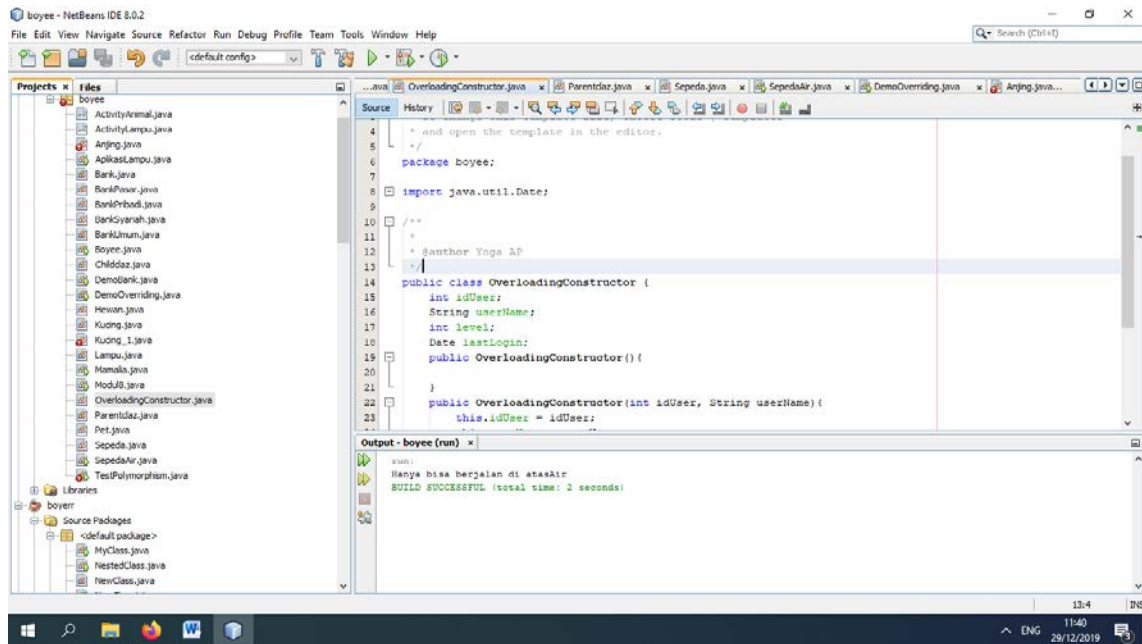


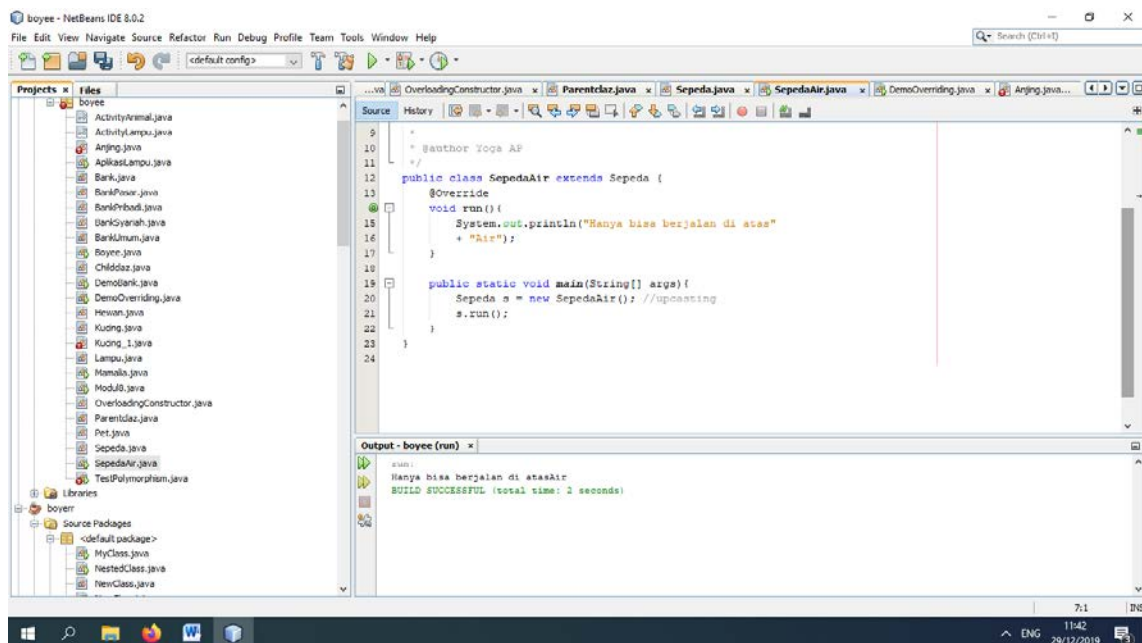
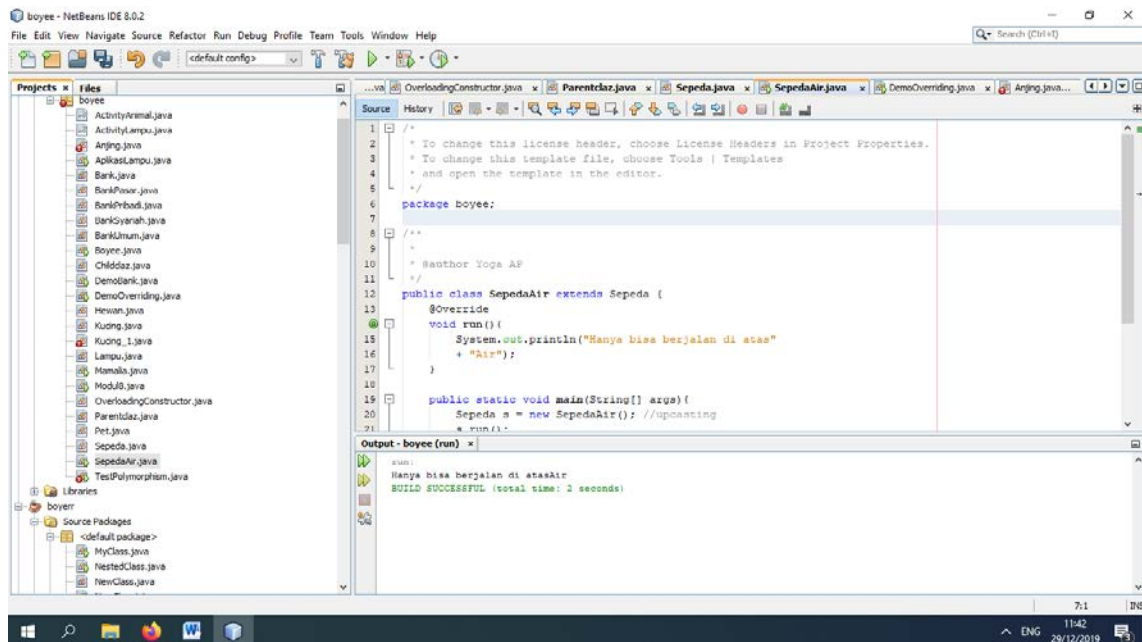
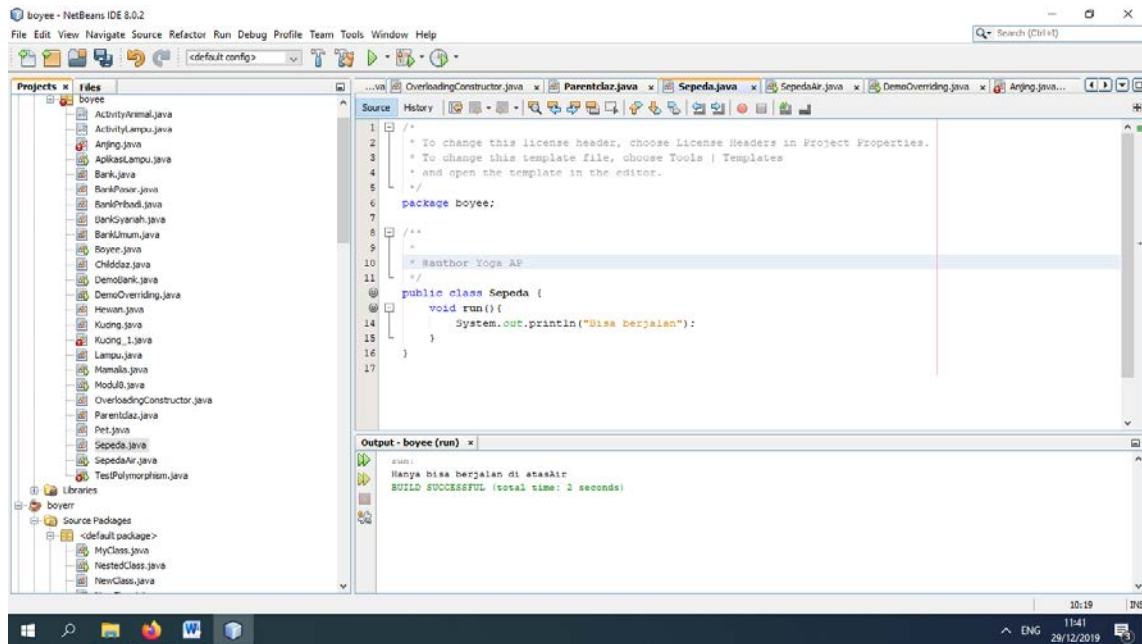
Nama : Yoga Ade P
NIM : L200180204
Kelas : E (Prak. PBO)

MODUL 8









Tugas Modul 8

1. Lihat kembali Program. 4 mengenai Overriding, buatlah class Elang yang memiliki method jalan() namun implementasinya berbeda dari kedua class sebelumnya!

The screenshot shows an IDE with the following code in `Elang.java`:

```
1  /*  
2   * To change this template, choose Tools | Templates  
3   * and open the template in the editor.  
4   */  
5  
6  /**  
7   *  
8   * @author hp  
9   */  
10 public class Elang extends Hewan {  
11     @Override  
12     public void jalan() {  
13         System.out.println("Elang bisa terbang dengan sayap"+" dan berjalan dengan kaki"  
14     }  
15 }  
16
```

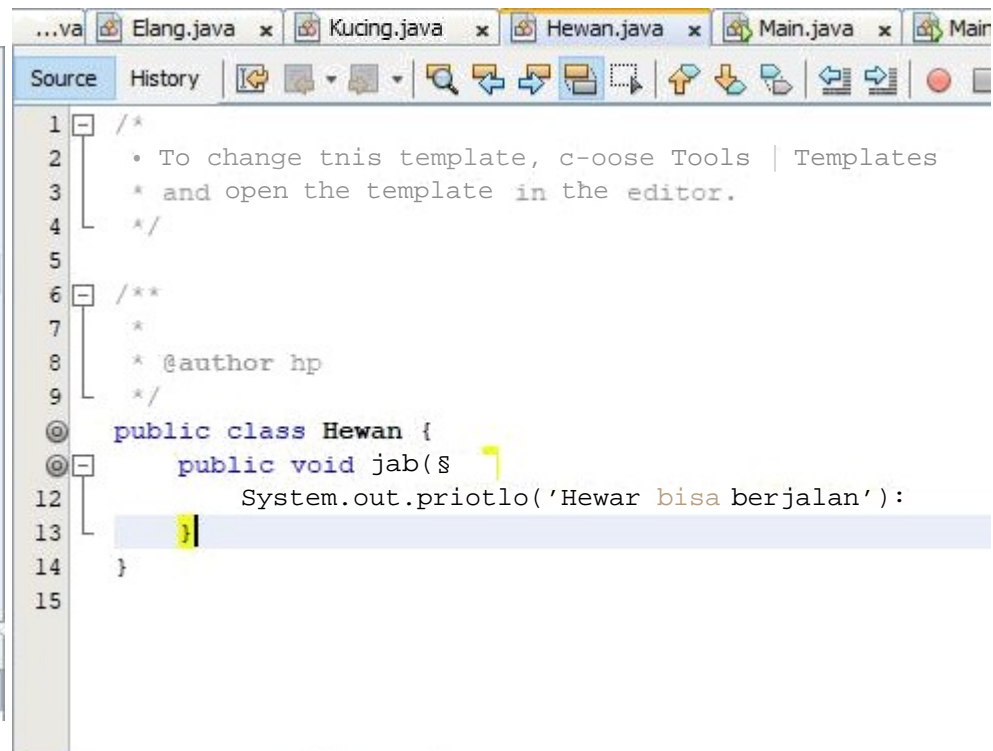
The output window shows the following results:

```
run:  
Hewan bisa berjalan  
Kucing bisa berjalan dengan kaki dan berlari  
Elang bisa terbang dengan sayap dan berjalan dengan kaki  
BUILD SUCCESSFUL (total time: 0 seconds)
```

The screenshot also shows the `Kucing.java` file in the background, which contains the following code:

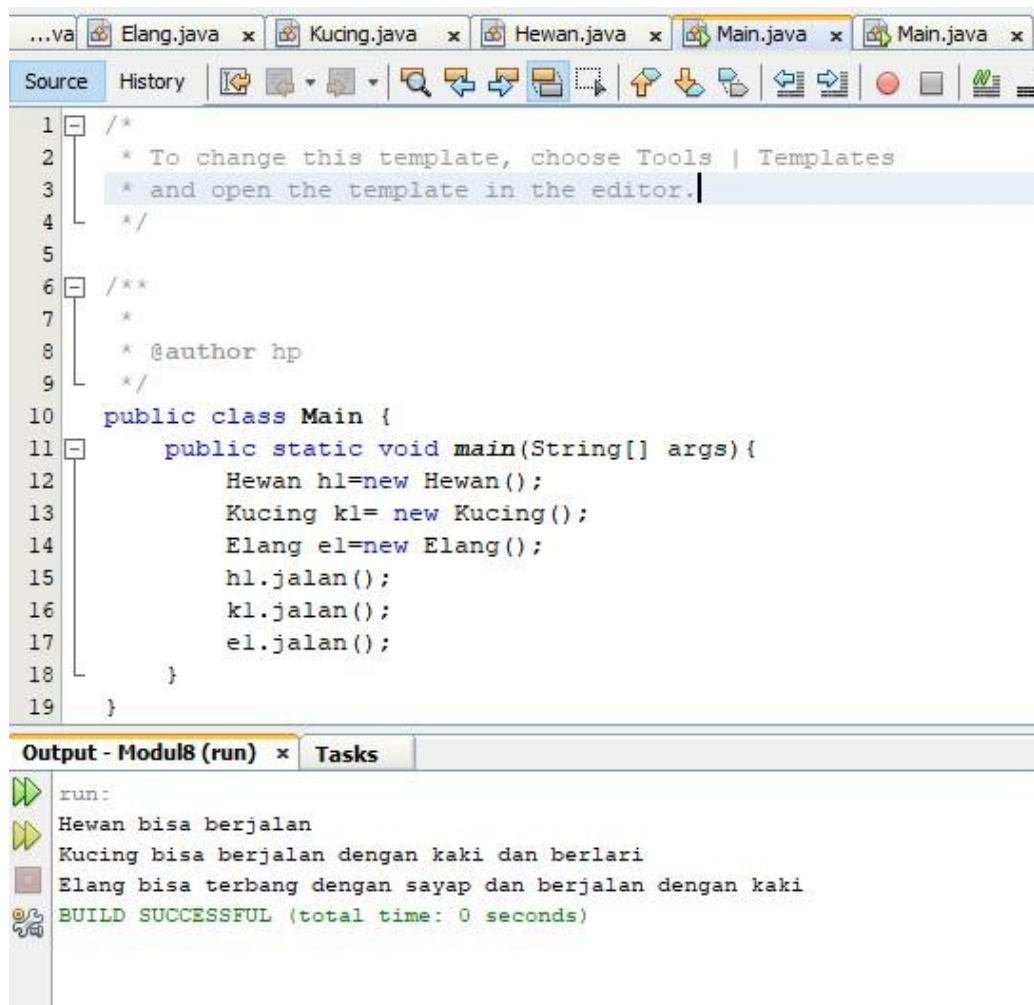
```
1  /*  
2   * To change this template, choose Tools | Templates  
3   * and open the template in the editor.  
4   */  
5  
6  /**  
7   *  
8   * @author hp  
9   */  
10 public class Kucing extends Hewan {  
11     @Override  
12     public void jalan() {  
13         System.out.println("Kucing bisa berjalan dengan kaki"+" dan berlari");  
14     }  
15 }  
16
```

The output window for the second run shows the same results as the first run, confirming that the `Elang` class is correctly overriding the `jalan()` method.



```
1  /*
2   * To change this template, choose Tools | Templates
3   * and open the template in the editor.
4   */
5
6  /**
7   *
8   * @author hp
9   */
10 public class Hewan {
11     public void jab() {
12         System.out.println("Hewan bisa berjalan");
13     }
14 }
15
```

▶▶ Hewan bisa berjalan
Kucing bisa berjalan dengan kaki dan berlari
Elang bisa terbang dengan sayap dan bersaingan dengan anai
BUILD SUCCESSFUL (total time: 0 seconds)



The screenshot shows an IDE window with several tabs: `...va`, `Elang.java`, `Kucing.java`, `Hewan.java`, `Main.java`, and another `Main.java`. The `Source` tab is active, displaying the following Java code:

```
1  /*
2   * To change this template, choose Tools | Templates
3   * and open the template in the editor.
4   */
5
6  /**
7   *
8   * @author hp
9   */
10 public class Main {
11     public static void main(String[] args){
12         Hewan h1=new Hewan();
13         Kucing k1= new Kucing();
14         Elang e1=new Elang();
15         h1.jalan();
16         k1.jalan();
17         e1.jalan();
18     }
19 }
```

Below the code editor, the `Output - Modul8 (run)` tab is active, showing the following output:

```
run:
Hewan bisa berjalan
Kucing bisa berjalan dengan kaki dan berlari
Elang bisa terbang dengan sayap dan berjalan dengan kaki
BUILD SUCCESSFUL (total time: 0 seconds)
```

2. **Buatlah class baru dengan nama `CustomerData()`, tambahkan variable nama, alamat, tanggal lahir, pekerjaan, dan gaji. Selanjutnya buatlah overloading constructor dari class tersebut.**

```

1  /*
2   * To change this template, choose Tools | Templates
3   * and open the template in the editor.
4   */
5   package modul8;
6
7   /**
8    *
9    * @author hp
10   */
11  public class CustomerData {
12      String nama;
13      String alamat;
14      int tanggalLahir;
15      String pekerjaan;
16      double gaji;
17
18      public CustomerData(String nama) {
19          this.nama = nama;
20          System.out.println(this.nama);
21      }
22      public CustomerData(String nama, String alamat) {
23          this.nama = nama;
24          System.out.println(this.nama);
25          this.alamat = alamat;
26          System.out.println(this.alamat);
27      }
28      public CustomerData(String nama, String alamat, int tanggalahir) {
29          this.nama=nama;
30
31
32      }
33      public CustomerData(String nama, String alamat, int tanggalahir, String pekerjaan) {
34          this.nama=nama;
35          this.alamat = alamat;
36          this.tanggalLahir=tanggalahir;
37          this.pekerjaan=pekerjaan;
38      }
39      public CustomerData(String nama, String alamat, int tanggalahir, String pekerjaan, int gaji) {
40          this.nama=nama;
41          this.alamat = alamat;
42          this.tanggalLahir=tanggalahir;
43          this.pekerjaan=pekerjaan;
44          this.gaji=gaji;
45          System.out.println("Nama :"+ nama +
46              "\nAlamat : " + alamat +
47              "\nTanggal Lahir : " + tanggalahir +
48              "\nPekerjaan : " + pekerjaan +
49              "\nGaji : " + gaji + "\n\n");
50      }
51  }
52

```

3. **Buatlah class baru dengan method main() yang disertai 10 object customer dari class CustomerData().**

The screenshot shows an IDE with two tabs open: 'Main.java' and 'CustomerData.java'. The 'Main.java' tab is active, showing the following code:

```

1  /*
2  * To change this template, choose Tools | Templates
3  * and open the template in the editor.
4  */
5  package modul8;
6
7  /**
8   *
9   * @author hp
10  */
11  public class Main {
12      public static void main(String [] args){
13          CustomerData c1= new CustomerData("Bintang", "Grobogan", 6112000, "PNS", 10000000);
14          CustomerData c2= new CustomerData("Dyah", "Semarang", 7112000, "Gubernur", 10000000);
15          CustomerData c3= new CustomerData("Mahadika", "Blora", 6102000, "Teknisi", 10000000);
16          CustomerData c4= new CustomerData("Elin", "Boyolali", 9122000, "Wiraswasta", 10000000);
17          CustomerData c5= new CustomerData("Ayuk", "Salatiga", 512000, "karyawan", 10000000);
18          CustomerData c6= new CustomerData("Finka", "Rembang", 27102000, "Hakim", 10000000);
19          CustomerData c7= new CustomerData("Rizal", "Grobogan", 6112000, "Dosen", 10000000);
20          CustomerData c8= new CustomerData("Hanif", "Bandung", 7-5-1999, "Model", 10000000);
21          CustomerData c9= new CustomerData("Arya", "Jakarta", 1122000, "Pelajar", 10000000);
22          CustomerData c0= new CustomerData("Ipul", "Surabaya", 10122000, "Dokter", 10000000);
23      }
24  }
25
26

```

The 'CustomerData.java' tab is also visible, showing the following code:

```

11  public class Main {
12      public static void main(String [] args){
13          CustomerData c1= new CustomerData("Bintang", "Grobogan", 6112000, "PNS", 10000000);
14          CustomerData c2= new CustomerData("Dyah", "Semarang", 7112000, "Gubernur", 10000000);

```

The 'Output - Modul8 (run)' window shows the results of running the program, displaying details for several customer objects:

```

run:
Nama :Bintang
Alamat : Grobogan
Tanggal Lahir :6112000
Pekerjaan :PNS
Gaji :10000000

Nama :Dyah
Alamat : Semarang
Tanggal Lahir :7112000
Pekerjaan :Gubernur
Gaji :10000000

Nama :Mahadika
Alamat : Blora
Tanggal Lahir :6102000
Pekerjaan :Teknisi
Gaji :10000000

Nama :Elin
Alamat : Boyolali
Tanggal Lahir :9122000
Pekerjaan :Wiraswasta
Gaji :10000000

```

4. Buatlah class berdasarkan diagram UML berikut ini! Terapkan teknik polimorphism dan tampilkan hasil output program.

```
...va Elang.java x Kucing.java x Hewan.java x Main.java x Main.java x
Source History
1
2    'o change this template, choose Tools | Templates
3    and open the template in the editor.
4
5    package modul8;
6
7    /**
8     *
9     * @author hp
10    */
11    public class Bank {
12        protected int rb(int rb){
13            System.out.println("Bank : "+ rb);
14            return rb;
15        }
16    }
17
```

```
...va Elang.java x Kucing.java x Hewan.java x Main.java x Main.java x
Source History
1    /**
2     * To change this template, choose Tools | Templates
3     * and open the template in the editor.
4     */
5    package modul8;
6
7    /**
8     *
9     * @author hp
10    */
11    public class BankPribadi {
12        protected int rb(int rb){
13            System.out.println("Bank Pribadi : "+ rb);
14            return rb;
15        }
16    }
17
```

```
...va Elang.java x Kucing.java x Hewan.java x Main.java x Main.java x
Source History
1
2      'o change this template, choose Tools | Templates
3      and open the template in the editor.
4
5      package modul8;
6
7      /**
8       *
9       * @author hp
10     */
11     public class BankUmun {
12     protected int rb(int rb){
13         System.out.println("Bank Umun : "+ rb);
14         return rb;
15     }
16 }
17
```

```
...va Hewan.java x Main.java x Main.java x CustomerData.java x Ba
Source History
1      /**
2      * To change this ze plate, choose Tools | Teqolates
3      * and open t.e te late in the editor.
4      */
5      package modul8;
6
7      /**
8       *
9       * @author hp
10     */
11     public class BankPasar {
12     protected int rb(int rb){
13         System.out.priotlo{'Saxk Pasar : "+ rb);
14         retuzn rb;
15     }
16 }
17
```



```
1
2
4
5 package modul8;

9
10
11
12 public class BarJkSyariah (
13     protected int rbliat rb){
14         System.out.println("Gaxk" + rb);
15         retuzn zb: iñ
16     }
17
```

..ava) Main.java x CustomerData.java. x Bank.java. x BankPribadi.jz



```
5 package modul8

7
8
9
10
11
12 public class Demo (
13     public static void maio {String[] args}{
14         Bank b1= new Bank{};
15         b1.rb15}:
16         BankPasar b2 = new BankPasar{};
17         b2.rb110}:
18         BankPribadi b3 = new BankPribadi{};
19         b3.rb115};
20         BankSyariah b4 = new BankSyariah();
21         b4.rb(20);
22     }
23
```



```
Bank : S
Bank Pasar : 10
Bank Pribadi : 1S
Bank Syariah . 20
9UILJ SUCCESSFUL itctal time. ? seconds)
```


Output - Modul8 (run) × Tasks

```
Bank . 5
_ Bank Pasar . 10
  BankPribaaio
  Bank Syariah . 20
  BUILT SUCCESSFUL itctal time. ? seconds)
```