

```

public class program1
{
    public static void main (String[ ] args)
    {
        int[ ] nilai = {3, 5, 18, 9, 35};
        for (int i = 0; i < 5; i ++)
            System.out.println("Elemen ke=" + i +
" " + nilai[i]);
    }
}

```

---

```

import javax.swing.*;
public class program2
{
    public static void main (String[ ] args)
    {
        float[ ] nilai = new float[5];
        for (int i = 0; i < 5; i ++)
        {
            String bilangan =

                JOptionPane.showInputDialog("Masukkan
nilai:");

                System.out.println("Input angka: " +
bilangan);
                nilai[i] = Float.parseFloat(bilangan);
        }
        for (int i = 0; i < 5; i ++)
            System.out.println("Elemen ke-" + i + "
" + nilai[i]);
        System.exit(0);
    }
}

```

---

```

import javax.swing.*;
public class program3
{
    public static void main (String[ ] args)
    {
        int[ ] nilai = new int[10];
        int nilaiMaks;
        for (int i = 0; i < 10; i ++)
            nilai[i] = (int) (100 * Math.random());

        nilaiMaks = nilai[0];
        for (int i = 0; i < 10; i ++)
        {
            System.out.println(nilai[i]);
            if (nilai[i] > nilaiMaks)
                nilaiMaks = nilai[i];
        }
        System.out.println("Nilai maksimum = " +
nilaiMaks);
    }
}

```

---

```

public class program4
{
    public static void main (String[ ] args)
    {
        String teks = "Array adalah kumpulan data
yang bertipe"
        + "sama menggunakan nama yang sama
pula. "
        + " Setiap identifier berhubungan dengan
satu variable.";

        int spasi = 0;
        hurufHidup = 0;
    }
}

```

```

huruf = 0;
int jumlah = 0;
int indeks = -1;
String kata = "yang";

int panjangTeks = teks.length();
for (int i = 0; i < panjangTeks; i ++)
{
    char kar =
Character.toLowerCase(teks.charAt(i));
    if (kar == 'a' || kar == 'e' || kar == 'i'
||
        kar == 'o' || kar == 'u')
        hurufHidup ++;
    if (Character.isLetter(kar))
        huruf ++;
    if (Character.isWhitespace(kar))
        spasi ++;
}

indeks = teks.indexOf(kata);
while (indeks >=0)
{
    ++ jumlah;
    indeks += kata.length();
    indeks = teks.indexOf(kata, indeks);
}
System.out.println("Teks berisi: ");
System.out.println("huruf hidup = " +
hurufHidup);
System.out.println("konsonan = " + (huruf -
hurufHidup));
System.out.println("spasi = " + spasi);

```

```

        System.out.println("Teks berisi kata : " +
"\n" +
        "yang = " + jumlah);
    }
}

```

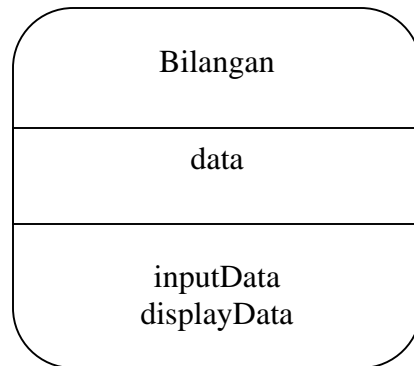
---

```

import javax.swing.*;
public class program5
{
    public static void main (String[ ] args)
    {
        int[ ][ ] x = new int[4][ ];
        x[0] = new int[1];
        x[1] = new int[2];
        x[2] = new int[3];
        x[3] = new int[4];
        int i, j;
        for (i = 0; i < 4; i ++)
        {
            for (j = 0; j < i + 1; j ++)
            {
                String bilangan =
                JOptionPane.showInputDialog
                ("Masukkan
                nilai:");
                x[i][j] = Integer.parseInt(bilangan);
            }
        }
        for (i = 0; i < 4; i ++)
        {
            for (j = 0; j < i + 1; j ++)
                System.out.print(x[i][j] + " ");
            System.out.println();
        }
        System.exit(0);
    }
}

```

### Contoh Diagram UML :



### Program :

```
import javax.swing.*;
```

```
class Bilangan
```

```
{
    private int data;
```

```
    public void inputData( )
```

```
    {
        String teks = JOptionPane.showInputDialog("Masukkan angka: ");
        data = Integer.parseInt(teks);
    }
```

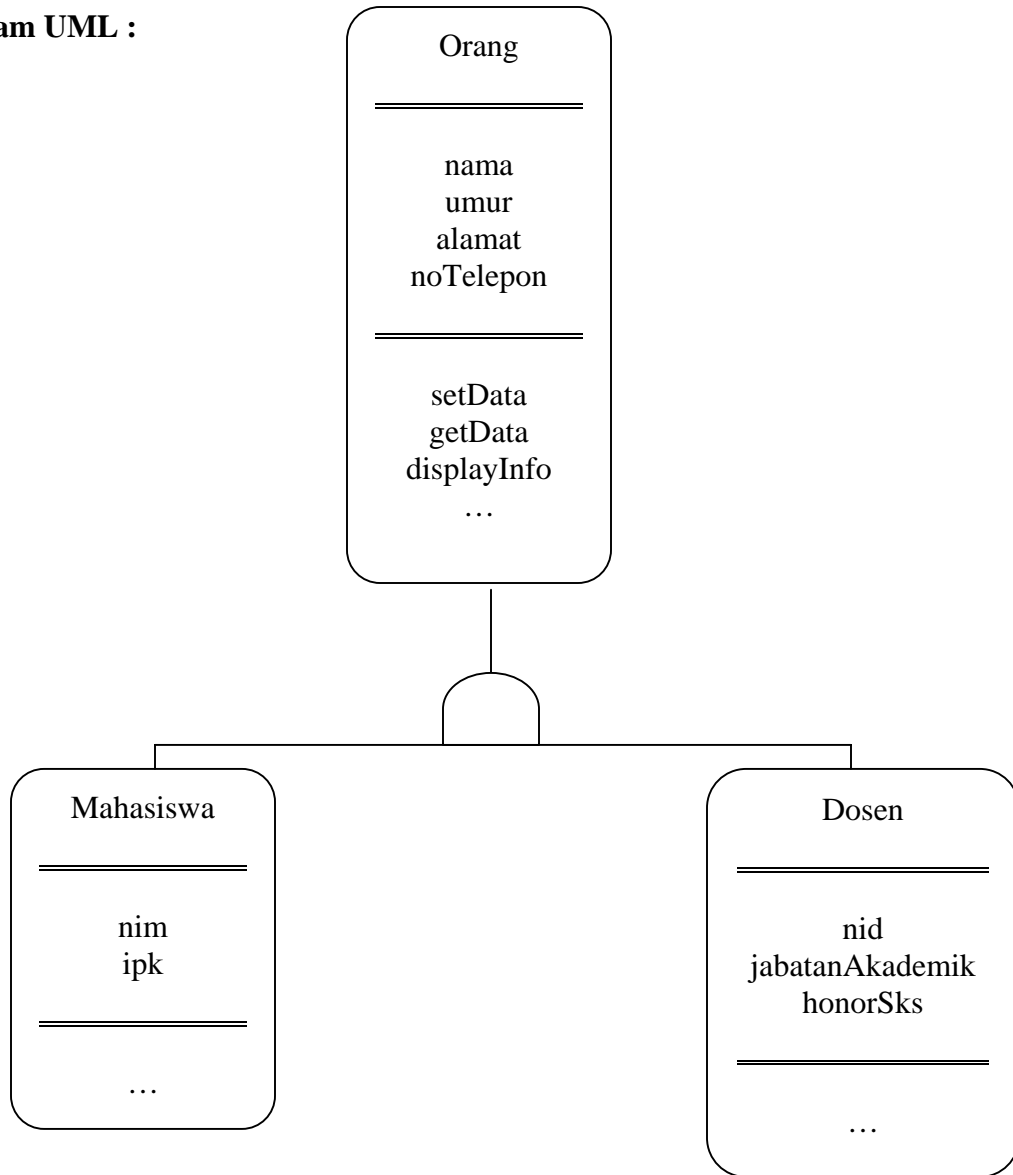
```
    public void displayData ( )
```

```
    {
        System.out.println ("Bilangan: " + this.data);
    }
}
```

```
public class BilanganInput
```

```
{
    public static void main (String [ ] args)
    {
        Bilangan bilangan1 = new Bilangan( );
        bilangan1.inputData( );
        bilangan1.displayData( );
        System.exit(0);
    }
}
```

**Diagram UML :**



## Program :

```
class Orang
{
    private String nama = "";
    private int umur;
    private String alamat = "";
    private String noTelepon = "";

    public Orang (String nm, int um, String al, String tel)
    {
        nama = nm;
        umur = um;
        alamat = al;
        noTelepon = tel;
    }

    public void setName (String nm)
    {
        this.nama = nm;
    }

    public void setUmur (int um)
    {
        this.umur = um;
    }

    public void setAddress (String al)
    {
        this.alamat = al;
    }

    public void setTelepon (String tel)
    {
        this.noTelepon = tel;
    }

    public String getName ( )
    {
        return nama;
    }

    public int getUmu r ( )
    {
        return umur;
    }
}
```

```

public String getAlamat ()
{
    return alamat;
}

public String getTelepon ()
{
    return noTelepon;
}

public String displayInfo ()
{
    return "Nama: " + nama + "; Umur: " + umur +
        "; Alamat: " + alamat + "; Telepon: " + noTelepon;
}
}

```

```

class Dosen extends Orang
{
    private String nid = "";
    private String jabatanAkademik = "";
    private float honorSks;

    public Dosen (String nm, int um, String al, String tel, String nd, String ja, float
ga)
    {
        super (nm, um, al, tel);
        nid = nd;
        jabatanAkademik = ja;
        honorSks = ga;
    }

    public void setNID (String nd)
    {
        this.nid = nd;
    }

    public void setJabatan (String ja)
    {
        this.jabatanAkiademik = ja;
    }
}

```



```

public void setGaji (float ga)
{
    this.honorSks = ga;
}

public String getNID ()
{
    return nid;
}

public String getJabatan ()
{
    return jabatanAkademik;
}

public float getGaji ()
{
    return honorSks;
}

public String displayInfo ()
{
    return super.displayInfo() + ", NID: " + nid + "; Jabatan: " +
jabatan Akademik + "; Gaji: " + honorSks;
}
}

```

```

class Mahasiswa extends Orang
{
    private String nim = "";
    private float ipk;

    public Dosen (String nm, int um, String al, String tel, String ni, float ip)
    {
        super (nm, um, al, tel);
        nim = nm;
        ipk = ip;
    }

    public void setNim (String ni)
    {
        this.nim = ni;
    }
}

```

```

public void setIpk (float ip)
{
    this.ipk = ip;
}

public String getNim ( )
{
    return nim;
}

public float getIpk ( )
{
    return ipk;
}

public String displayInfo ( )
{
    return super.displayInfo() + ", NIM: " + nim + "; IPK: " + ipk;
}
}

public class Perkuliahan
{
    public static void main (String [ ] args)
    {
        Dosen dsn = new Dosen("Hartono", 40, "Jakarta", "", "L102", "Lektor", 25000);
        Mahasiswa mhs = new Mahasiswa("Andi", 20, "Jakarta", "3413789", "2001", 3);
        System.out.println(dsn.displayInfo ( ));
        System.out.println(mhs.displayInfo ( ));
    }
}

```