

Tugas Pemrograman Berorientasi Objek
Praktikum 4 (Overriding dan Overloading)



Disusun oleh :

M Al Faiz Putra J (21091397072)

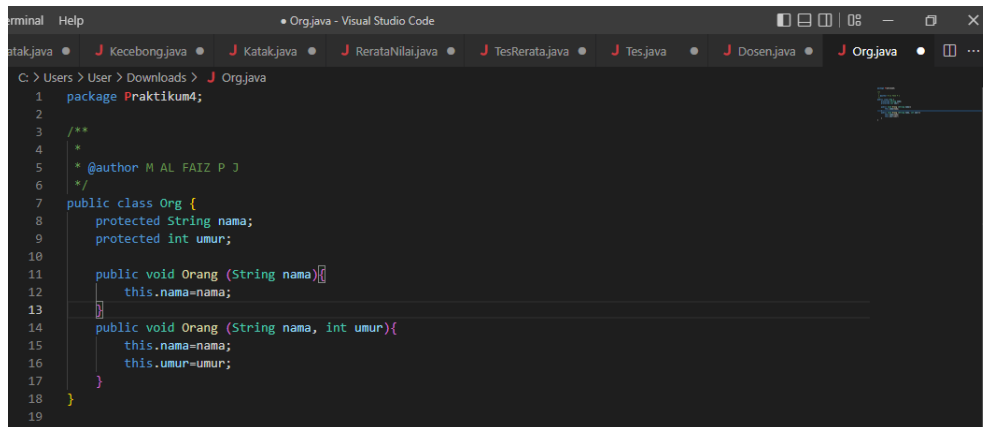
Program Studi D4 Manajemen Informatika

Fakultas Vokasi

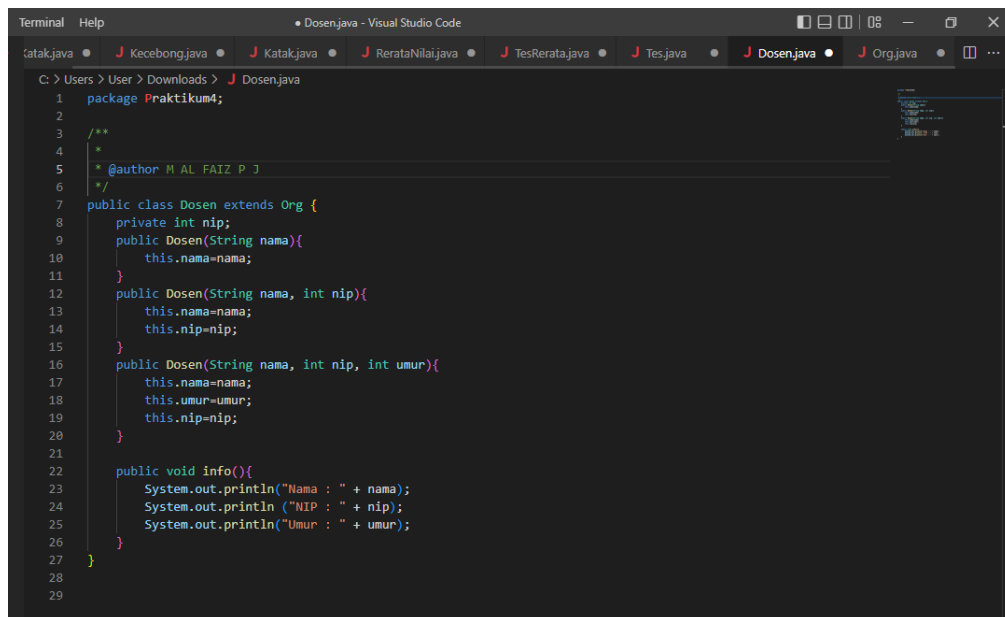
Universitas Negeri Surabaya

2022

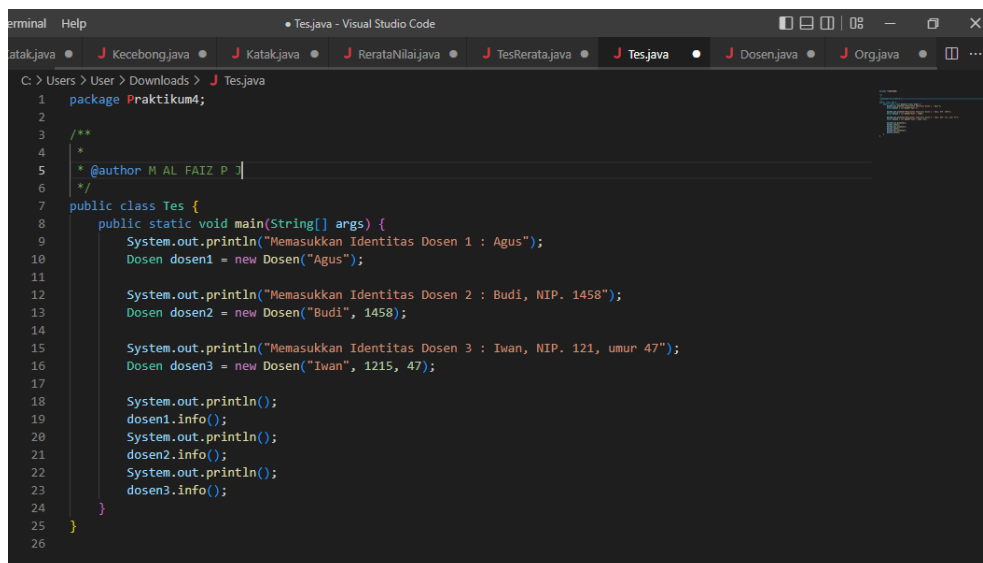
1.



```
1 package Praktikum4;
2
3
4 /**
5  *
6  * @author M AL FAIZ P J
7  */
8 public class Org {
9     protected String nama;
10    protected int umur;
11
12    public void Orang (String nama){
13        this.nama=nama;
14    }
15
16    public void Orang (String nama, int umur){
17        this.nama=nama;
18        this.umur=umur;
19    }
20 }
```



```
1 package Praktikum4;
2
3
4 /**
5  *
6  * @author M AL FAIZ P J
7  */
8 public class Dosen extends Org {
9     private int nip;
10    public Dosen(String nama){
11        this.nama=nama;
12    }
13    public Dosen(String nama, int nip){
14        this.nama=nama;
15        this.nip=nip;
16    }
17    public Dosen(String nama, int nip, int umur){
18        this.nama=nama;
19        this.umur=umur;
20        this.nip=nip;
21    }
22
23    public void info(){
24        System.out.println("Nama : " + nama);
25        System.out.println ("NIP : " + nip);
26        System.out.println("Umur : " + umur);
27    }
28 }
29
```



```
1 package Praktikum4;
2
3
4 /**
5  *
6  * @author M AL FAIZ P J
7  */
8 public class Tes {
9     public static void main(String[] args) {
10        System.out.println("Memasukkan Identitas Dosen 1 : Agus");
11        Dosen dosen1 = new Dosen("Agus");
12
13        System.out.println("Memasukkan Identitas Dosen 2 : Budi, NIP. 1458");
14        Dosen dosen2 = new Dosen("Budi", 1458);
15
16        System.out.println("Memasukkan Identitas Dosen 3 : Iwan, NIP. 121, umur 47");
17        Dosen dosen3 = new Dosen("Iwan", 1215, 47);
18
19        System.out.println();
20        dosen1.info();
21        System.out.println();
22        dosen2.info();
23        System.out.println();
24        dosen3.info();
25    }
26 }
```

Output :

```
Output - Praktikum4 (run) x
run:
Memasukkan Identitas Dosen 1 : Agus
Memasukkan Identitas Dosen 2 : Budi, NIP. 1458
Memasukkan Identitas Dosen 3 : Iwan, NIP. 121, umur 47

Nama : Agus
NIP : 0
Umur : 0

Nama : Budi
NIP : 1458
Umur : 0

Nama : Iwan
NIP : 1215
Umur : 47
BUILD SUCCESSFUL (total time: 0 seconds)
```

2.

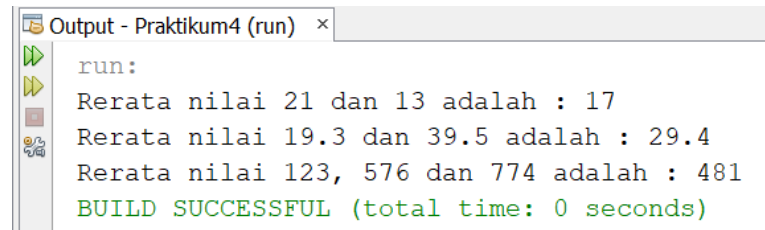
```
terminal Help
• TesRerata.java - Visual Studio Code
Katak.java • J Kecebong.java • J Katak.java • J RerataNilai.java • J TesRerata.java • J Tes.java • J Dosen.java • J Org.java • ...

C: > Users > User > Downloads > J TesRerata.java
1 package Praktikum4;
2
3
4 /**
5  * @author M AL FAIZ P J
6  */
7 public class TesRerata {
8     public static void main(String[] args) {
9         RerataNilai rn = new RerataNilai();
10        System.out.println("Rerata nilai 21 dan 13 adalah : "+rn.average(21, 13));
11        System.out.println("Rerata nilai 19.3 dan 39.5 adalah : "+rn.average(19.3, 39.5));
12        System.out.println("Rerata nilai 123, 576 dan 774 adalah : "+rn.average(123, 576, 774));
13    }
14 }
15
```

```
terminal Help
• RerataNilai.java - Visual Studio Code
Katak.java • J Kecebong.java • J Katak.java • J RerataNilai.java • J TesRerata.java • J Tes.java • J Dosen.java • J Org.java • ...

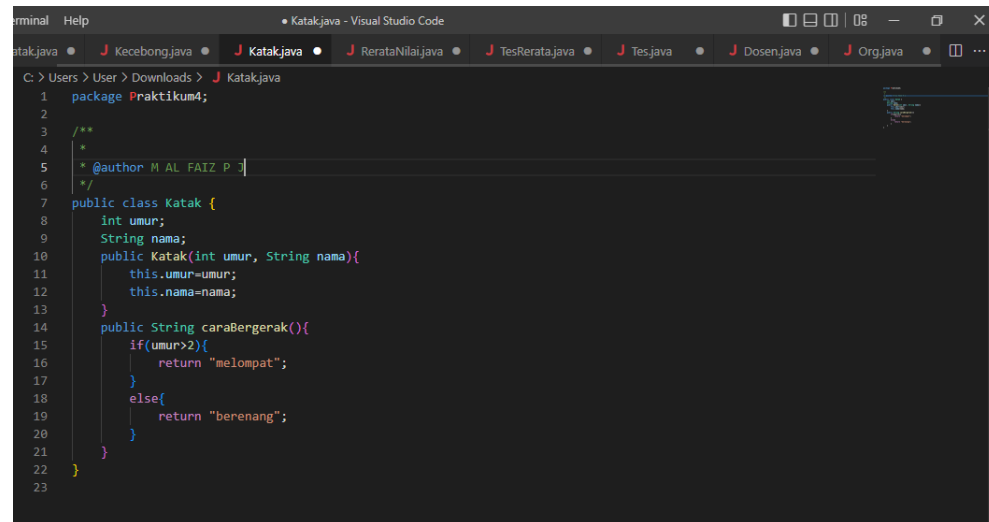
C: > Users > User > Downloads > J RerataNilai.java
1 package Praktikum4;
2
3
4 /**
5  * @author M AL FAIZ P J
6  */
7 public class RerataNilai {
8     public int average(int a, int b){
9         return (a+b)/2;
10    }
11    public double average(double a, double b){
12        return (a+b)/2;
13    }
14    public int average(int a, int b, int c){
15        return (a+b+c)/3;
16    }
17 }
18
```

OUTPUT :



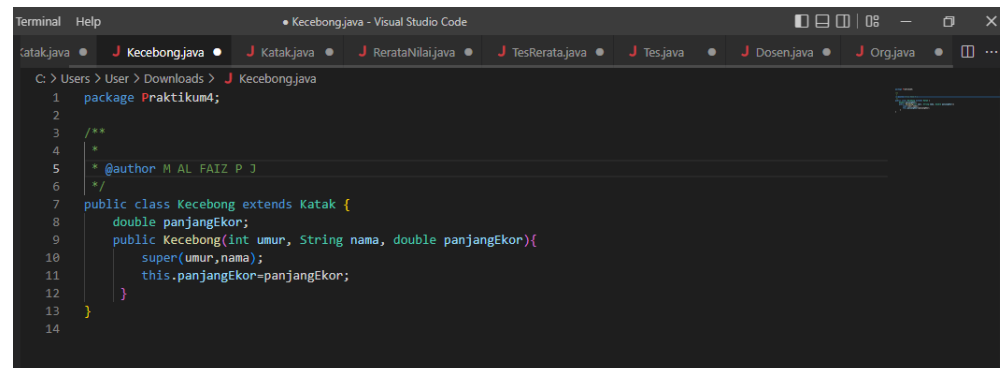
```
run:
Rerata nilai 21 dan 13 adalah : 17
Rerata nilai 19.3 dan 39.5 adalah : 29.4
Rerata nilai 123, 576 dan 774 adalah : 481
BUILD SUCCESSFUL (total time: 0 seconds)
```

3.



```
terminal  Help
Katak.java • J Kecebong.java • J Katak.java • J RerataNilai.java • J TesRerata.java • J Tes.java • J Dosen.java • J Org.java • ...

C: > Users > User > Downloads > J Katak.java
1 package Praktikum4;
2
3
4 /**
5  * @author M AL FAIZ P J
6  */
7 public class Katak {
8     int umur;
9     String nama;
10    public Katak(int umur, String nama){
11        this.umur=umur;
12        this.nama=nama;
13    }
14    public String caraBergerak(){
15        if(umur>2){
16            return "melompat";
17        }
18        else{
19            return "berenang";
20        }
21    }
22 }
23
```



```
terminal  Help
Kecebong.java • J Kecebong.java • J Katak.java • J RerataNilai.java • J TesRerata.java • J Tes.java • J Dosen.java • J Org.java • ...

C: > Users > User > Downloads > J Kecebong.java
1 package Praktikum4;
2
3
4 /**
5  * @author M AL FAIZ P J
6  */
7 public class Kecebong extends Katak {
8     double panjangEkor;
9     public Kecebong(int umur, String nama, double panjangEkor){
10         super(umur,nama);
11         this.panjangEkor=panjangEkor;
12     }
13 }
14
```

```
Terminal Help • TesKatak.java - Visual Studio Code
TesKatak.java • Kecebong.java • Katak.java • RerataNilai.java • TesRerata.java • Tes.java • Dosen.java • Org.java ...
C: > Users > User > Downloads > TesKatak.java
1 package Praktikum4;
2
3
4 /**
5  * @author M AL FAIZ P.
6  */
7 public class TesKatak {
8     public static void main(String[] args) {
9         Katak O1 = new Katak(5,"Froggy");
10        Kecebong O2 = new Kecebong(2,"Junior Frog",10);
11        System.out.println("Obyek O1");
12        System.out.println("Umur : "+O1.umur);
13        System.out.println("Nama : "+O1.nama);
14        System.out.println("Cara bergerak : "+O1.caraBergerak());
15        System.out.println();
16        System.out.println("Obyek O2");
17        System.out.println("Umur : "+O2.umur);
18        System.out.println("Nama : "+O2.nama);
19        System.out.println("Panjang ekor : "+O2.panjangEkor);
20        System.out.println("Cara bergerak : "+O2.caraBergerak());
21    }
22 }
23
```

OUTPUT :

```
Output - Praktikum4 (run) x
run:
Obyek O1
Umur : 5
Nama : Froggy
Cara bergerak : melompat

Obyek O2
Umur : 2
Nama : Junior Frog
Panjang ekor : 10.0
Cara bergerak : berenang
BUILD SUCCESSFUL (total time: 0 seconds)
```