

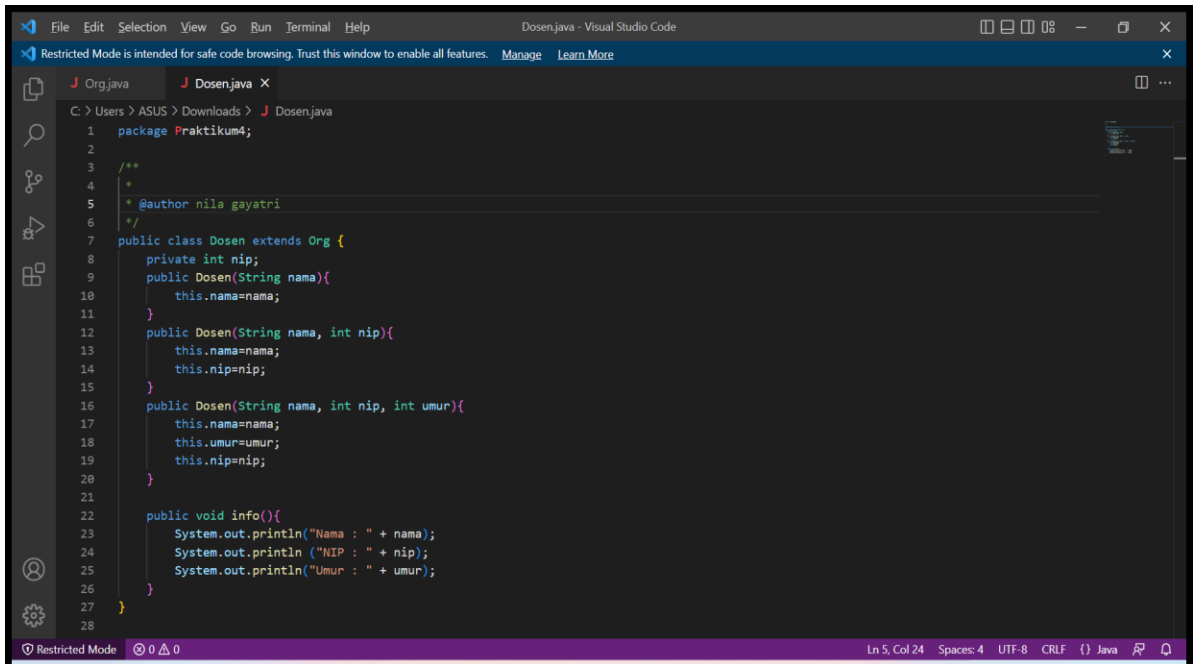
**Tugas Pemrograman Berorientasi Objek**  
**Praktikum 4 (Overriding dan Overloading)**



Disusun oleh :  
**Nila Gayatri (21091397066)**

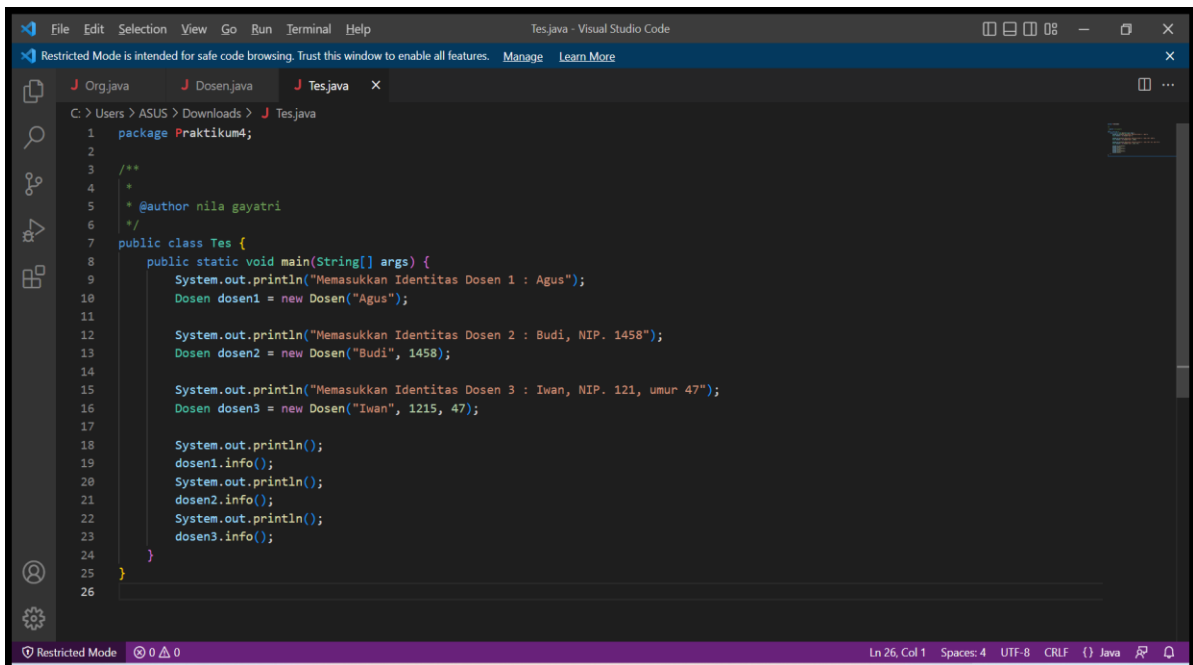
**Program Studi D4 Manajemen**  
**Informatika Fakultas Vokasi**  
**Universitas Negeri**  
**Surabaya2022**

## 1. Source Code



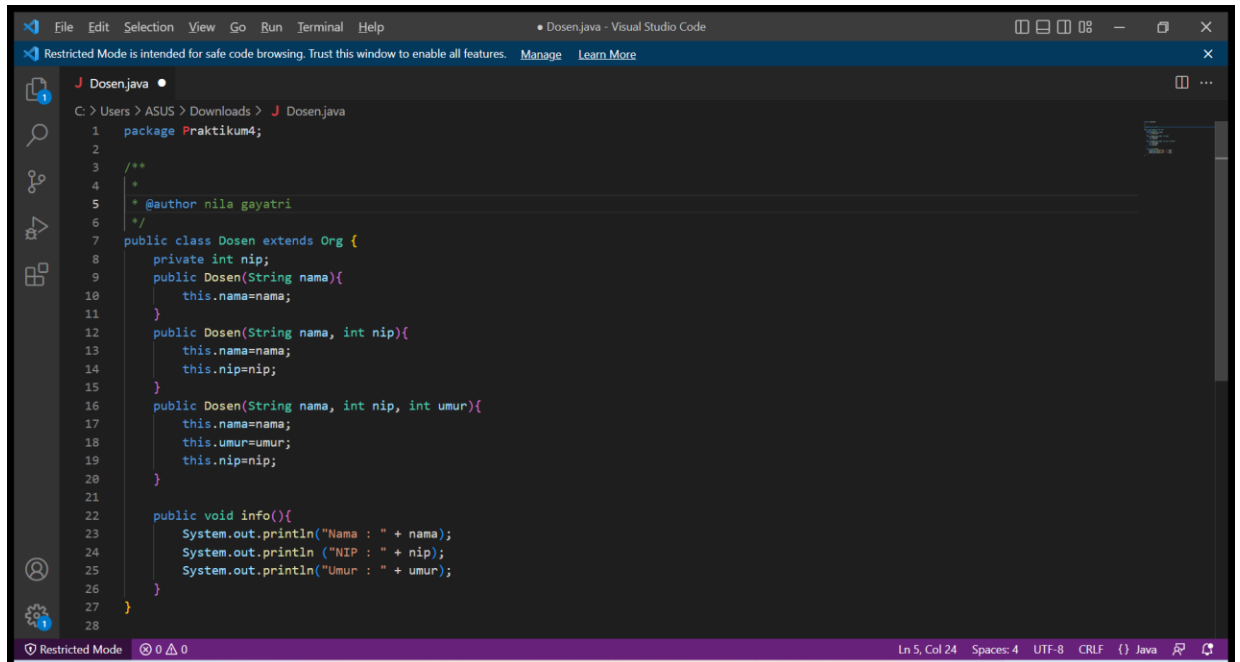
```
File Edit Selection View Go Run Terminal Help
Dosen.java - Visual Studio Code
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More

J Org.java J Dosen.java X
C:\Users\ASUS>Downloads> J Dosen.java
1 package Praktikum4;
2
3 /**
4  *
5  * @author nila gayatri
6  */
7 public class Dosen extends Org {
8     private int nip;
9     public Dosen(String nama){
10         this.nama=nama;
11     }
12     public Dosen(String nama, int nip){
13         this.nama=nama;
14         this.nip=nip;
15     }
16     public Dosen(String nama, int nip, int umur){
17         this.nama=nama;
18         this.umur=umur;
19         this.nip=nip;
20     }
21
22     public void info(){
23         System.out.println("Nama : " + nama);
24         System.out.println("NIP : " + nip);
25         System.out.println("Umur : " + umur);
26     }
27 }
28
Ln 5, Col 24 Spaces: 4 UTF-8 CRLF {} Java
```



```
File Edit Selection View Go Run Terminal Help
Tes.java - Visual Studio Code
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More

J Org.java J Dosen.java J Tes.java X
C:\Users\ASUS>Downloads> J Tes.java
1 package Praktikum4;
2
3 /**
4  *
5  * @author nila gayatri
6  */
7 public class Tes {
8     public static void main(String[] args) {
9         System.out.println("Memasukkan Identitas Dosen 1 : Agus");
10        Dosen dosen1 = new Dosen("Agus");
11
12        System.out.println("Memasukkan Identitas Dosen 2 : Budi, NIP. 1458");
13        Dosen dosen2 = new Dosen("Budi", 1458);
14
15        System.out.println("Memasukkan Identitas Dosen 3 : Iwan, NIP. 121, umur 47");
16        Dosen dosen3 = new Dosen("Iwan", 1215, 47);
17
18        System.out.println();
19        dosen1.info();
20        System.out.println();
21        dosen2.info();
22        System.out.println();
23        dosen3.info();
24    }
25 }
26
Ln 26, Col 1 Spaces: 4 UTF-8 CRLF {} Java
```



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

## Output:

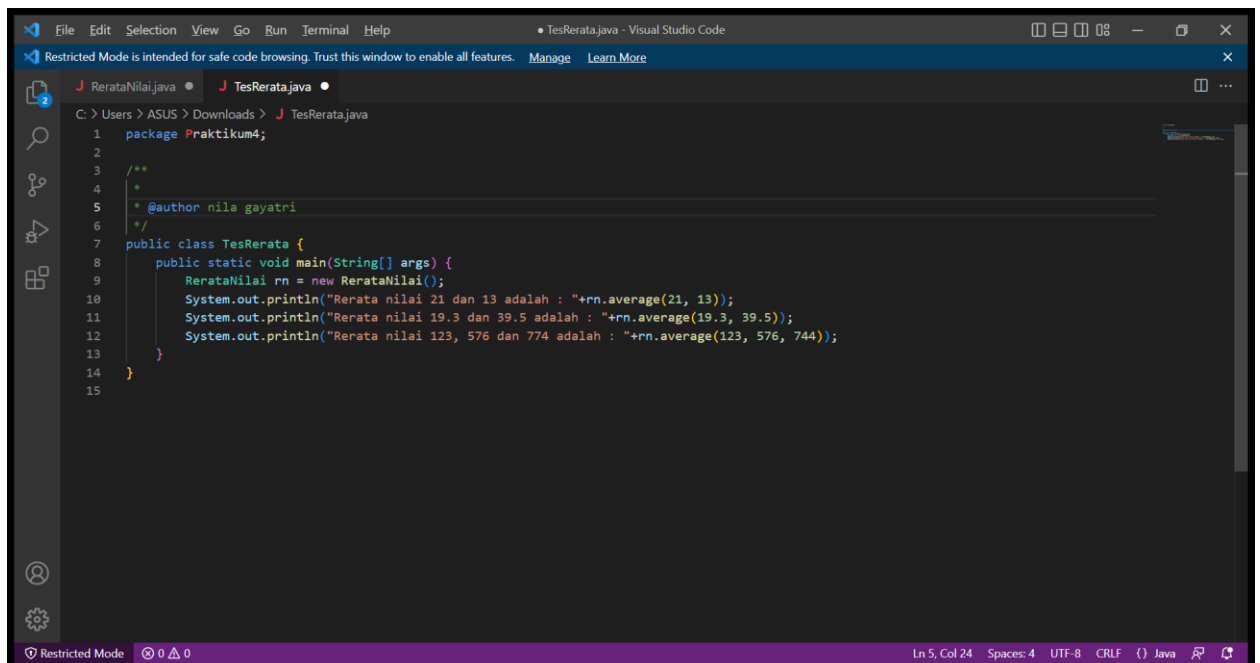
```
Memasukkan Identitas Dosen 1 : Kusnan
Memasukkan Identitas Dosen 2 : Jamal, NIP. 1568
Memasukkan Identitas Dosen 3 : Wawan, NIP. 1256, umur 45

Nama : Kusnan
NIP : 0
Umur : 0

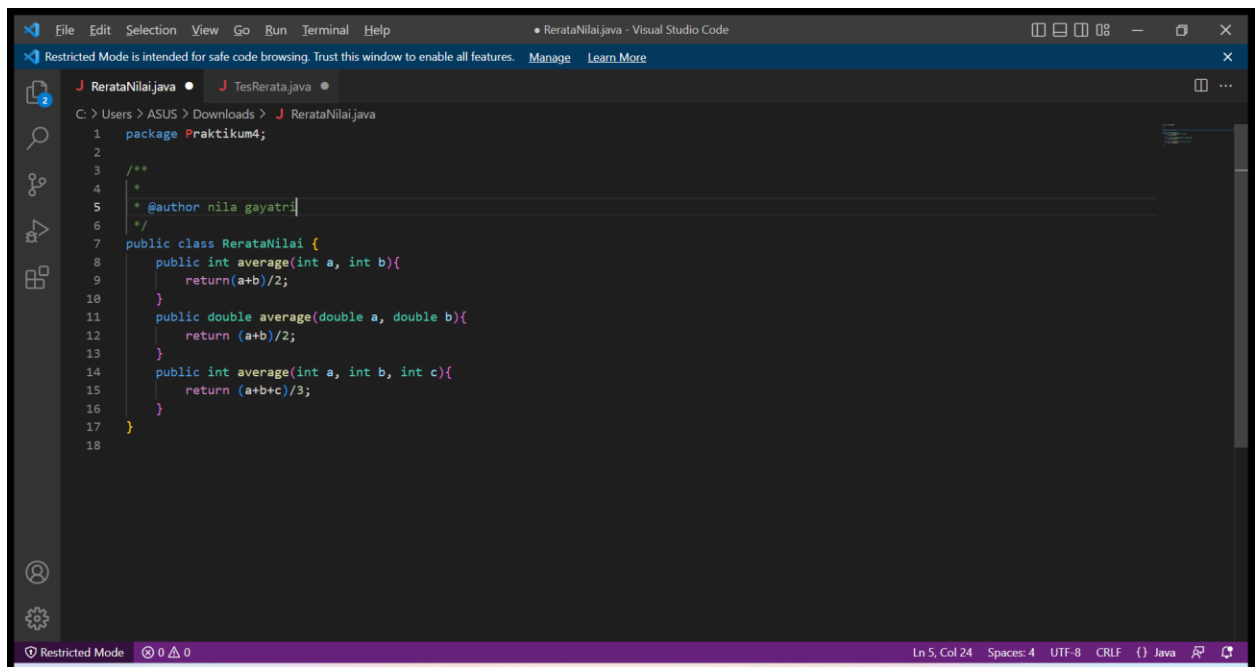
Nama : Jamal
NIP : 1568
Umur : 0

Nama : Wawan
NIP : 1256
Umur : 45
PS C:\KULIAH\1. TUGAS\semester 3\pbo\prak 4>
```

## 2. Source Code



```
1 package Praktikum4;
2
3 /**
4  *
5  * @author nila gayatri
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, 744));
13    }
14 }
15
```



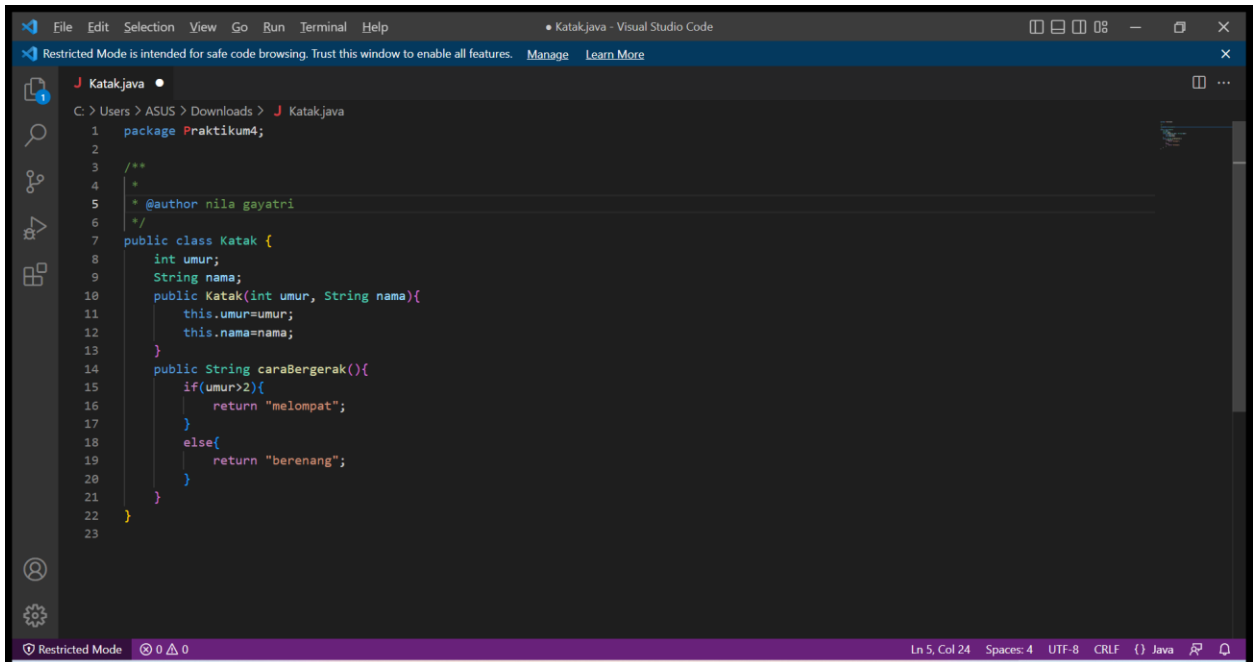
```
1 package Praktikum4;
2
3 /**
4  *
5  * @author nila gayatri
6  */
7 public class RerataNilai {
8     public int average(int a, int b){
9         return (a+b)/2;
10    }
11    public double average(double a, double b){
12        return (a+b)/2;
13    }
14    public int average(int a, int b, int c){
15        return (a+b+c)/3;
16    }
17 }
18
```

## Output

```
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
PS C:\KULIAH\1. TUGAS\semester 3\pbo\prak 4>
```

**Analisis :** dimana pada percobaan ini merupakan ada pewarisan yang sifatnya dari orang tua ke anak . namun dalam hal ini orang tua hanya mewariskan rata rata saja Adapun yang mengeksekusi bilanganya tetap dengan warisan dari orang tua tersebut.

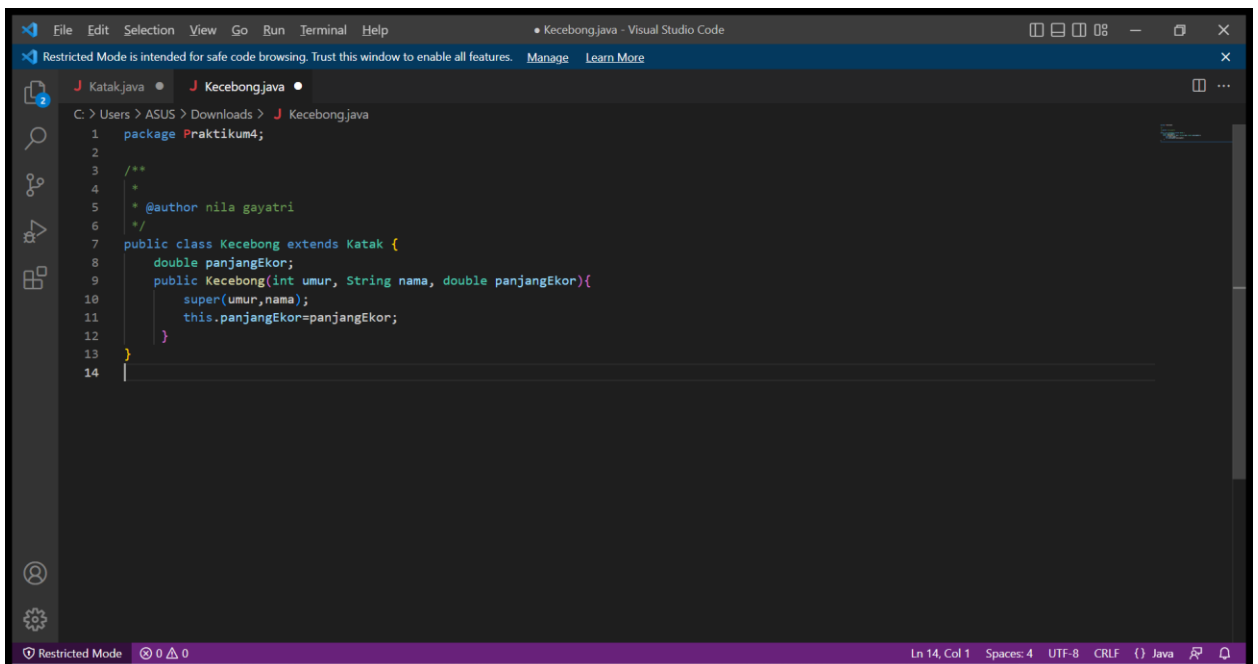
### 3. Source Code



The screenshot shows the Visual Studio Code editor with the file 'Katak.java' open. The editor is in 'Restricted Mode'. The code is as follows:

```
1 package Praktikum4;
2
3 /**
4  *
5  * @author nila gayatri
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
```

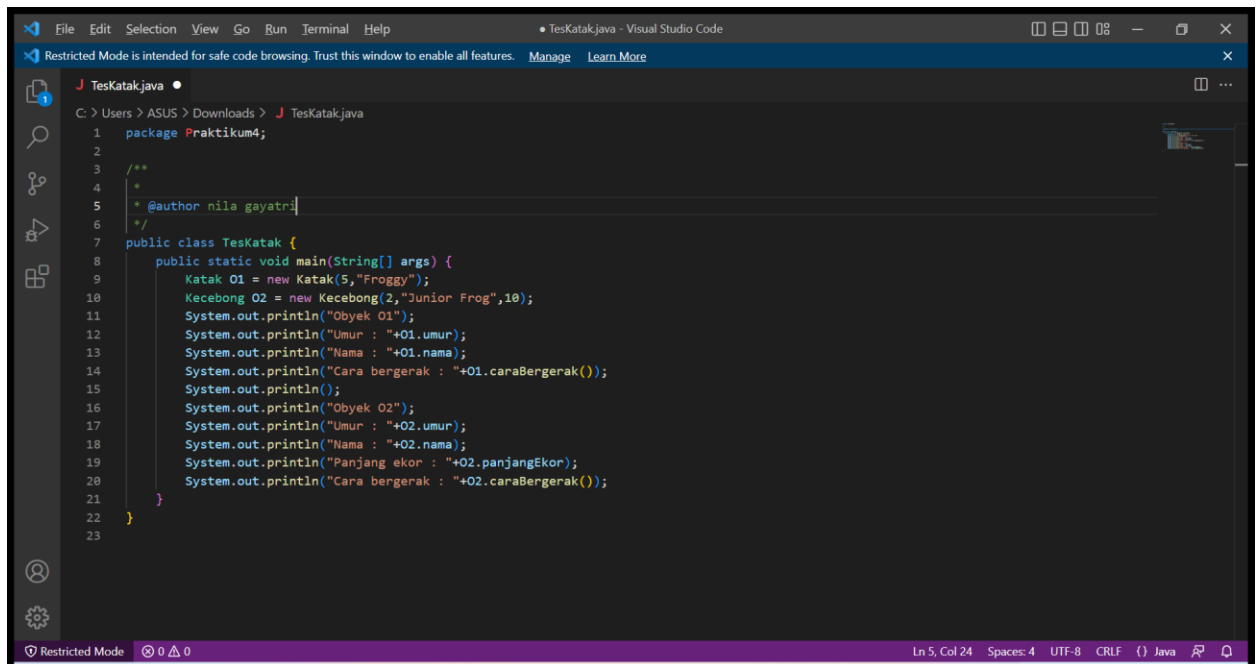
The status bar at the bottom indicates 'Restricted Mode', '0 0 0', and 'Ln 5, Col 24 | Spaces: 4 | UTF-8 | CRLF | () Java'.



The screenshot shows the Visual Studio Code editor with the file 'Kecebong.java' open. The editor is in 'Restricted Mode'. The code is as follows:

```
1 package Praktikum4;
2
3 /**
4  *
5  * @author nila gayatri
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
```

The status bar at the bottom indicates 'Restricted Mode', '0 0 0', and 'Ln 14, Col 1 | Spaces: 4 | UTF-8 | CRLF | () Java'.



```
File Edit Selection View Go Run Terminal Help
TesKatak.java - Visual Studio Code
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More

TesKatak.java
C:\Users\ASUS\Downloads> J TesKatak.java
1 package Praktikum4;
2
3 /**
4  *
5  * @author nila gayatri
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

Ln 5, Col 24 Spaces: 4 UTF-8 CRLF () Java
```

## Output:

```
Obyek O1
Umur : 5
Nama : Froggy
Cara bergerak : melompat

Obyek O2
Umur : 2
Nama : Junior Frog
Panjang ekor : 10.0
Cara bergerak : berenang
PS C:\KULIAH\1. TUGAS\semester 3\pbo\prak 4>
```