

## **Laporan Praktikum 4**

**Mata Kuliah Pemrograman Berorientasi Obyek**



**Oleh:**

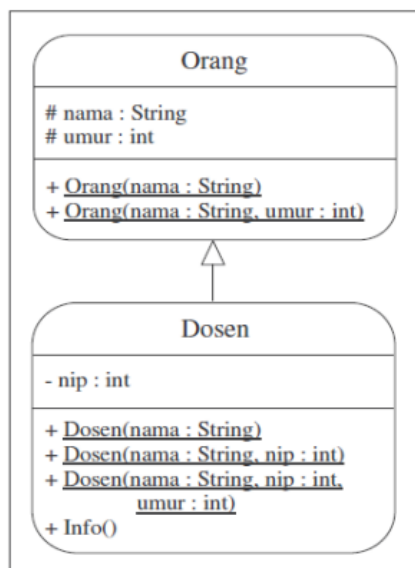
**Refila Dyah Ghizanda Wardoyo (21091397041)**

**PROGRAM STUDI D4 MANAJEMEN INFORMATIKA**

**FAKULTAS VOKASI**

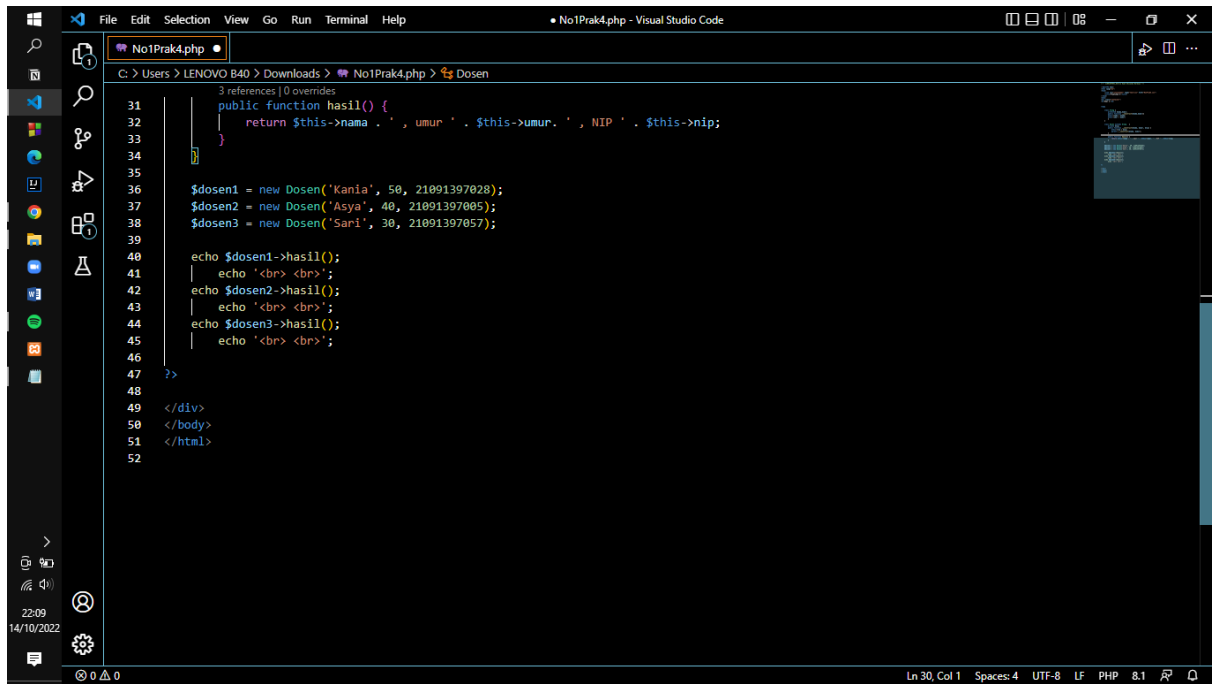
**UNIVERSITAS NEGERI SURABAYA**

1. Buatlah program berdasarkan UML berikut



Source code: PHP

```
1 <!-- 21091397041_Refila Dyah Ghizanda Wardoyo -->
2
3 <!DOCTYPE html>
4 <html lang="en">
5 <head>
6     <link rel="stylesheet" type="text/css" href="No1Prak4.css">
7     <title>Praktikum 4</title>
8 </head>
9 <body>
10 <div class="container">
11 <h2>Soal 1</h2>
12
13
14 <?php
15
16     2 references | 1 implementation
17     class Orang {
18         protected $nama,$umur;
19         1 reference | 1 override
20         public function __construct($nama,$umur){
21             $this->nama = $nama;
22             $this->umur = $umur;
23         }
24
25     3 references | 0 implementations
26     class Dosen extends Orang {
27         2 references
28         private $nip;
29         4 references | 0 overrides | prototype
30         public function __construct($nama, $umur, $nip) {
31             $this->nip = $nip;
32             parent::__construct($nama, $umur);
33         }
34     }
35 }
```



```
31 public function hasil() {
32     return $this->nama . ' , umur ' . $this->umur . ' , NIP ' . $this->nip;
33 }
34
35
36 $dosen1 = new Dosen('Kania', 50, 21091397028);
37 $dosen2 = new Dosen('Asya', 40, 21091397005);
38 $dosen3 = new Dosen('Sari', 30, 21091397057);
39
40 echo $dosen1->hasil();
41 echo '<br> <br>';
42 echo $dosen2->hasil();
43 echo '<br> <br>';
44 echo $dosen3->hasil();
45 echo '<br> <br>';
46
47 }
48
49 </div>
50 </body>
51 </html>
52
```

Output

## Soal 1

Kania , umur 50 , NIP 21091397028

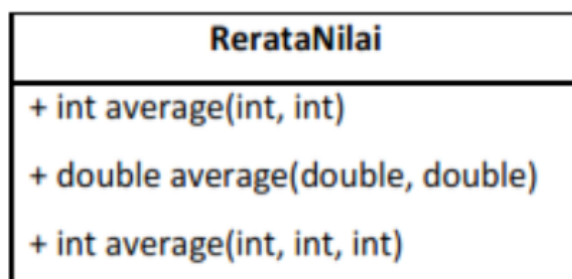
Asya , umur 40 , NIP 21091397005

Sari , umur 30 , NIP 21091397057

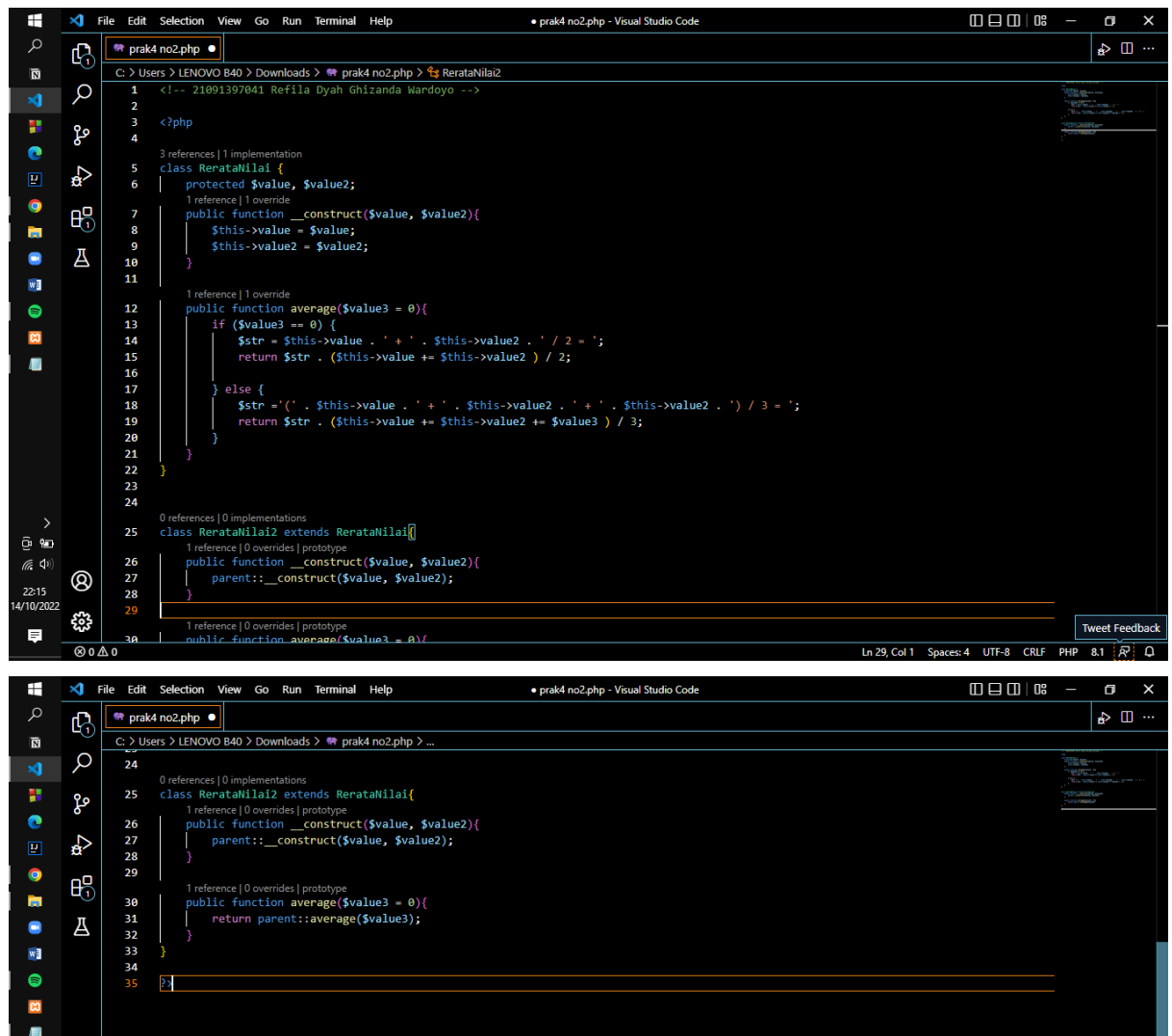
Analisa

Menggunakan kata kunci super di konstruktor dan method, pada program tersebut masingmasing kita tambahkan konstruktor dengan paramaternya.

2. Buat program berdasarkan UML berikut



## Source code: PHP



```
1 <!-- 21091397041 Reflla Dyah Ghizanda Wardoyo -->
2
3 <?php
4
5 3 references | 1 implementation
6 class RerataNilai {
7     protected $value, $value2;
8     public function __construct($value, $value2){
9         $this->value = $value;
10        $this->value2 = $value2;
11    }
12
13    1 reference | 1 override
14    public function average($value3 = 0){
15        if ($value3 == 0) {
16            $str = $this->value . ' + ' . $this->value2 . ' / 2 = ';
17            return $str . ($this->value + $this->value2) / 2;
18        } else {
19            $str = '(' . $this->value . ' + ' . $this->value2 . ' + ' . $this->value2 . ' ) / 3 = ';
20            return $str . ($this->value + $this->value2 + $value3) / 3;
21        }
22    }
23
24    0 references | 0 implementations
25    class RerataNilai2 extends RerataNilai{
26        1 reference | 0 overrides | prototype
27        public function __construct($value, $value2){
28            parent::__construct($value, $value2);
29        }
30
31        1 reference | 0 overrides | prototype
32        public function average($value3 = 0){
33            return parent::average($value3);
34        }
35    }
```

## Output

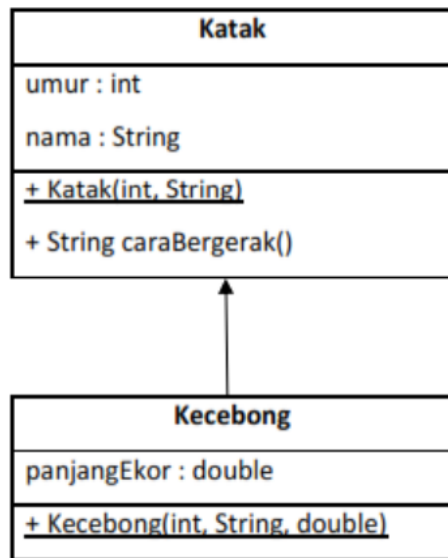
### Soal NO 2

$$(8 + 8 + 8) / 3 = 6$$

## Analisa

Program dengan nama method boleh sama tetapi jumlah parameter mesti berbeda nilai yang di return harus mempunyai tipe yang sam

3. Buat program berdasarkan UML berikut



Source code: PHP

```
1 <!-- 21091397041 Refila Dyah Ghizanda Wardoyo -->
2
3 <?php
4
5 3 references | 1 implementation
6 class Katak{
7     protected $umur, $nama;
8     2 references | 1 override
9     public function __construct($umur, $nama){
10         $this->umur = $umur;
11         $this->nama = $nama;
12     }
13     0 references | 0 overrides
14     public function getUmur(){
15         return $this->umur;
16     }
17     0 references | 0 overrides
18     public function getNama(){
19         return $this->nama;
20     }
21     0 references | 1 override
22     public function caraBergerak(){
23         return 'Melompat';
24     }
25 }
26
27 1 reference | 0 implementations
28 class Kecebong extends Katak{
29     2 references
30     private $panjangEkor;
31     2 references | 0 overrides | prototype
32     public function __construct($umur, $nama, $sekor){
33         $this->panjangEkor = $sekor;
34         parent::__construct($umur, $nama);
35     }
36     0 references | 0 overrides
37     public function getpanjangekor(){
38         return $this->panjangEkor;
39     }
40     0 references | 0 overrides | prototype
41     public function carabergarak(){
42         return 'Berenang';
43     }
44 }
45
46 $katak = new Katak(7, 'RahCan');
47 $kecebong = new Kecebong(8, 'Junior RahCan', 10);
48
49 >>
```

A screenshot of the Visual Studio Code editor interface. The top menu bar includes File, Edit, Selection, View, Go, Run, Terminal, and Help. The file explorer on the left shows a project named 'prak4 no3.php' with a sub-file 'css.txt' selected. The editor window displays the following CSS code:

```
1 h2{
2   margin: auto;
3   text-align: center;
4   padding-bottom: 10px;
5 }
6
7 .table{
8   margin: auto;
9   font-family: sans-serif;
10  border-collapse: collapse;
11 }
12
13 .table, td{
14   border: 1px solid;
15   padding: 8px 10px;
16 }
17
18 thead{
19   font-weight: bold;
20 }
```

Output

### Soal NO 3

Objek	Umur	Nama	Panjang Ekor	Cara Bergerak
01	5	Froggy	-	Melompat
02	5	Junior Froggy	10	Berenang

Analisa

Keyword super tidak bisa digunakan secara langsung didalam method static seperti pada method main, jadi harus di panggil pada method void atau return terlebih dahulu lalu panggil pada method main/static.