

## **Laporan Praktikum 4**

### **Mata Kuliah Pemrograman Berorientasi Obyek**



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**PROGRAM STUDI D4 MANAJEMEN INFORMATIKA**

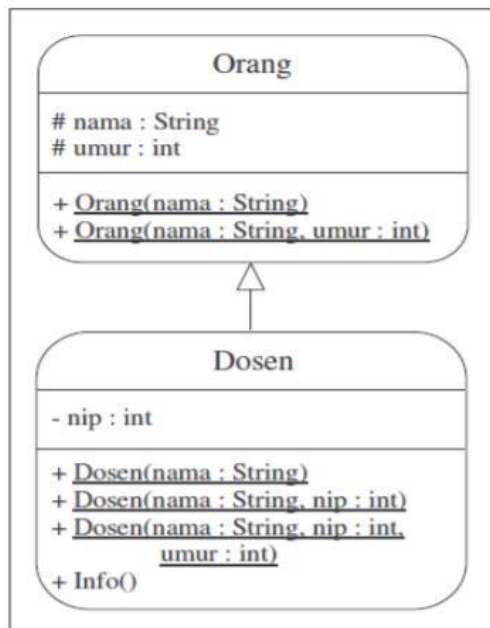
**FAKULTAS VOKASI**

**UNIVERSITAS NEGERI SURABAYA (UNESA)**

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## Praktikum 4 PBO

1. Buatlah Program berdasarkan UML dibawah ini



## Source Code

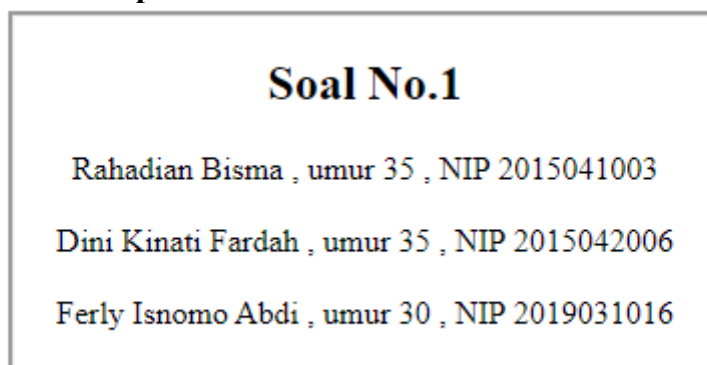
- PHP

```
prak4 no1.php
1 <!-- DWI RAMADHANIASARI
2      21091397057 -->
3
4 <!DOCTYPE html>
5 <html lang="id">
6 <head>
7     <link rel="stylesheet" type="text/css" href="prak4 no1.css">
8     <title>Praktikum 4</title>
9 </head>
10 <body>
11 <div class="container">
12 <h2>Soal No.1</h2>
13 <?php
14     class Orang {
15         protected $nama,$umur;
16         public function __construct($nama,$umur){
17             $this->nama = $nama;
18             $this->umur = $umur;
19         }
20     }
21
22     class Dosen extends Orang {
23         private $nip;
24         public function __construct($nama, $umur, $nip) {
25             $this->nip = $nip;
26             parent::__construct($nama, $umur);
27         }
28
29         public function hasil() {
30             return $this->nama . ' , umur ' . $this->umur . ' , NIP ' . $this->nip;
31         }
32     }
33
34     $dosen1 = new Dosen('Rahadian Bisma', 35, 2015041003);
35     $dosen2 = new Dosen('Dini Kinati Fardah', 35, 2015042006);
36     $dosen3 = new Dosen('Ferly Isnomo Abdi', 30, 2019031016);
37
38     echo $dosen1->hasil();
39     echo '<br> <br>';
40     echo $dosen2->hasil();
41     echo '<br> <br>';
42     echo $dosen3->hasil();
43     echo '<br> <br>';
44 <?>
45 </div>
46 </body>
47 </html>
```

- CSS

```
prak4 no1.css
1 body {
2   align-items: center;
3 }
4 h2{
5   text-align: center;
6 }
7
8 .container{
9   margin: auto;
10  text-align: center;
11  width: 350px;
12  border-style: groove;
13 }
```

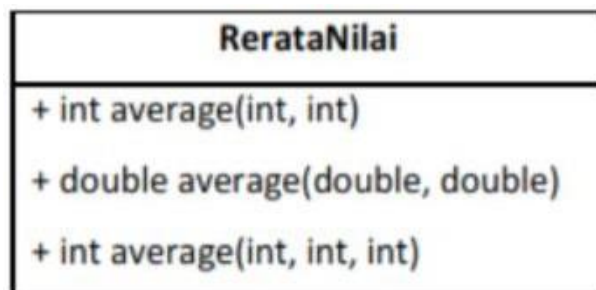
- Output



- Analisa

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

## 2. Buatlah Program berdasarkan UML dibawah ini



- Source Code

## PHP

```
prak4 no2.php
1 <!-- DWI RAMADHANIASARI
2 21091397057 -->
3
4 <?php
5
6 class RerataNilai {
7     protected $value, $value2;
8     public function __construct($value, $value2){
9         $this->value = $value;
10        $this->value2 = $value2;
11    }
12
13    public function average($value3 = 0){
14        if ($value3 == 0) {
15            $str = $this->value . ' + ' . $this->value2 . ' / 2 = ';
16            return $str . ($this->value += $this->value2 ) / 2;
17        } else {
18            $str = '(' . $this->value . ' + ' . $this->value2 . ' + ' . $this->value2 . ' ) / 3 = ';
19            return $str . ($this->value += $this->value2 += $value3 ) / 3;
20        }
21    }
22 }
23
24
25
26 class RerataNilai2 extends RerataNilai{
27     public function __construct($value, $value2){
28         parent::__construct($value, $value2);
29     }
30
31     public function average($value3 = 0){
32         return parent::average($value3);
33     }
34 }
35
36 ?>
```

```
index no2.php x
1  <!-- DWI RAMADHANIASARI
2      21091397057 -->
3
4  <?php
5      require_once 'prak4 no2.php';
6  ?>
7
8  <html lang="id">
9  <head>
10     <link rel="stylesheet" href="prak4 no2.css">
11     <title>Praktikum 4</title>
12 </head>
13 <body>
14 <div class="container">
15 <h2>Soal No.2</h2>
16 <div class="form">
17     <form action="" method="post">
18         <input type="number" name="input1">
19         <input type="number" name="input2">
20         <input type="number" name="input3">
21         <button type="submit" name="submit">Submit</button>
22     </form>
23 </div>
24
25     <?php
26         if (isset($_POST['submit'])) {
27             if (!$_POST['input3']) {
28                 $value1 = new RerataNilai2($_POST['input1'], $_POST['input2']);
29                 echo $value1->average(0);
30             } else {
31                 $value1 = new RerataNilai2($_POST['input1'], $_POST['input2']);
32                 echo $value1->average($_POST['input3']);
33             }
34         }
35     ?>
36 </div>
37 </body>
38 </html>
```

- CSS

```
prak4 no2.css x
1  .container {
2      margin: auto;
3      text-align: center;
4      width: 650px;
5      height: 150px;
6      border-style: groove;
7  }
```

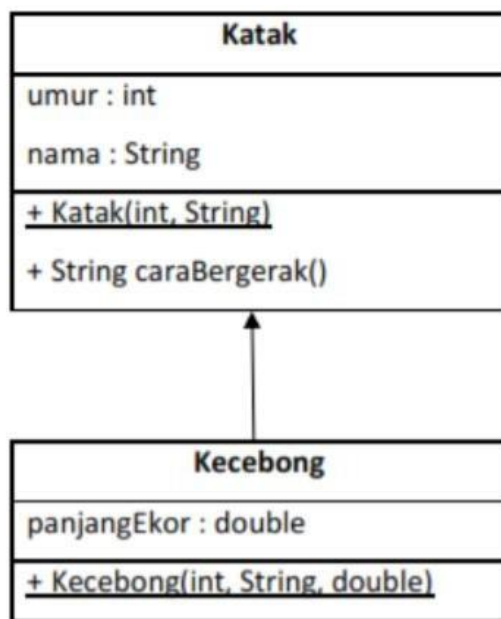
- **Output**

<b>Soal No.2</b>			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Submit"/>
$(2 + 2 + 2) / 3 = 2$			

- **Analisa**

Diatas adalah program dengan nama method boleh Sama, Tapi Jumlah parameter mesti berbeda nilai yang di Return harus mempunyai tipe yang sama.

**3. Buatlah Program berdasarkan UML dibawah ini**



## Source Code

- PHP

```
prak4 no3.php x
1 |!-- DWI RAMADHANIASARI
2 | 21091397057 -->
3
4 <?php
5
6 class Katak{
7     protected $umur, $nama;
8     public function __construct($umur, $nama){
9         $this->umur = $umur;
10        $this->nama = $nama;
11    }
12    public function getUmur(){
13        return $this->umur;
14    }
15    public function getNama(){
16        return $this->nama;
17    }
18    public function caraBergerak(){
19        return 'Melompat';
20    }
21 }
22
23 class Kecebong extends Katak{
24     private $panjangEkor;
25     public function __construct($umur, $nama, $ekor){
26         $this->panjangEkor = $ekor;
27         parent::__construct($umur, $nama);
28     }
29     public function getpanjangekor(){
30         return $this->panjangEkor;
31     }
32     public function caraberggerak(){
33         return 'Berenang';
34     }
35 }
36
37 $katak = new katak(5, 'Froggy');
38 $kecebong = new kecebong(5, 'Junior Froggy', 10);
39
40 ?>
```



```

index no3.php
1 <!-- DWI RAMADHANIASARI
2      21091397057 -->
3
4 <?php
5     require_once 'prak4 no3.php';
6 >
7
8 <html lang="id">
9 <head>
10    <link rel="stylesheet" type="text/css" href="prak4 no3.css">
11    <title>Praktikum 4</title>
12 </head>
13 <body>
14 <h2><center>Soal No.3</center></h2>
15 <table align="center">
16
17 <tr align="center">
18 <thead>
19 <td>Objek</td>
20 <td>Umur</td>
21 <td>Nama</td>
22 <td>Panjang Ekor</td>
23 <td>Cara Bergerak</td>
24 </thead>
25 </tr>
26
27 <tbody>
28 <tr>
29 <td>01</td>
30 <td><?=$katak->getUmur() ?> </td>
31 <td><?=$katak->getnama() ?> </td>
32 <td>-</td>
33 <td><?=$katak->carabergarak() ?> </td>
34 </tr>
35
36 <tr>
37 <td>02</td>
38 <td><?=$kecebong->getUmur() ?></td>
39 <td><?=$kecebong->getNama() ?></td>
40 <td><?=$kecebong->getpanjangekor() ?></td>
41 <td><?=$kecebong->carabergarak() ?></td>
42 </tr>
43 </tbody>
44
45 </table>
46 </body>
47 </html>

```

- CSS

```

prak4 no3.css
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**

<b>Objek</b>	<b>Umur</b>	<b>Nama</b>	<b>Panjang Ekor</b>	<b>Cara Bergerak</b>
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.