

**LAPORAN TUGAS PRAKTIKUM 4**  
**Mata Kuliah Pemrograman Berbasis Objek**



**Oleh :**

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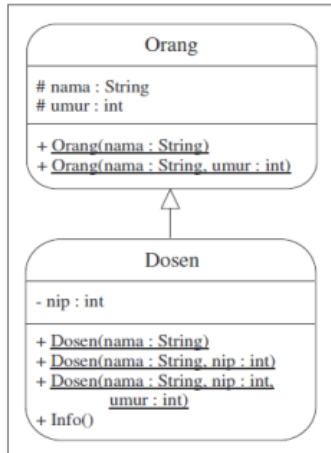
**Program vokasi**

**Universitas Negeri Surabaya**

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## Praktikum 4

1. Buatlah Program berdasarkan UML dibawah ini



Source code : PHP

```
# prak4 no1.css  prak4 no1.php X
prak4 no1.php > PHP Intelephense > html > body > div.container > Dosen > hasil
1  <!-- 21091397038 Ahmed Nur Sidik -->
2
3  <!DOCTYPE html>
4  <html lang="en">
5  <head>
6  |   <link rel="stylesheet" type="text/css" href="prak4 no1.css">
7  |   <title>Praktikum 4</title>
8  </head>
9  <body>
10 | <div class="container">
11 | <h2>Tugas praktikum 4 nomor 1</h2>
12 |
13 |
14 | <?php
15 |
16 |     class Orang {
17 |         protected $nama,$umur;
18 |         public function __construct($nama,$umur){
19 |             $this->nama = $nama;
20 |             $this->umur = $umur;
21 |         }
22 |     }
23 |
24 |     class Dosen extends Orang {
25 |         private $nip;
26 |         public function __construct($nama, $umur, $nip) {
27 |             $this->nip = $nip;
28 |             parent::__construct($nama, $umur);
29 |         }
30 |
31 |         public function hasil() {
32 |             return $this->nama . ' , Umur ' . $this->umur . ' , NIP ' . $this->nip;
33 |         }
34 |     }
35 |
36 |     $dosen1 = new Dosen('Albert', 20, 21091397046);
37 |     $dosen2 = new Dosen('Viora', 23, 21091397136);
38 |     $dosen3 = new Dosen('Regita', 19, 21091397138);
39
```

```

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>

```

#### Source Code: Css

```

# prak4 no1.css X  prak4 no1.php
# prak4 no1.css > .container
1  h2{
2      text-align: center;
3  }
4
5  .container{
6      margin: auto;
7      text-align: center;
8      height: 180px;
9      width: 350px;
10     border: 2px solid black;
11 }

```

#### Output

### Tugas praktikum 4 nomor 1

Albert , Umur 20 , NIP 21091397046

Viora , Umur 23 , NIP 21091397136

Regita , Umur 19 , NIP 21091397138

#### 2. Buat program berdasarkan UML berikut

RerataNilai
+ int average(int, int)
+ double average(double, double)
+ int average(int, int, int)

## Source code : PHP

```
prak4 no2 index.php X
prak4 no2 index.php > html > body
1  <!-- 21091397038 Ahmed Nur Sidik -->
2  <?php
3      require_once 'prak4 no2.php';
4  >
5  <html lang="id">
6  <head>
7      <link rel="stylesheet" href="prak4 no2.css">
8      <title>Praktikum 4</title>
9  </head>
10 <body>
11 <div class="container">
12 <h2>Soal Nomor 2</h2>
13 <div class="form">
14     <form action="" method="post">
15         <input type="number" name="input1">
16         <input type="number" name="input2">
17         <input type="number" name="input3">
18         <button type="submit" name="submit">Submit</button>
19     </form>
20 </div>
21
22     <?php
23         if (isset($_POST['submit'])) {
24             if (!$_POST['input3']) {
25                 $value1 = new RerataNilai2($_POST['input1'], $_POST['input2']);
26                 echo $value1->average(0);
27             } else {
28                 $value1 = new RerataNilai2($_POST['input1'], $_POST['input2']);
29                 echo $value1->average($_POST['input3']);
30             }
31         }
32     >
33 </div>
34 </body>
35 </html>
```

```
prak4 no2.php X
prak4 no2.php > PHP Intelephense > RerataNilai > __construct
1 <!-- 21091397038 Ahmed Nur Sidik -->
2
3 <?php
4
5 class RerataNilai {
6     protected $value, $value2;
7     public function __construct($value, $value2){
8         $this->value = $value;
9         $this->value2 = $value2;
10    }
11
12    public function average($value3 = 0){
13        if ($value3 == 0) {
14            $str = $this->value . ' + ' . $this->value2 . ' / 2 = ';
15            return $str . ($this->value += $this->value2 ) / 2;
16        } else {
17            $str = '(' . $this->value . ' + ' . $this->value2 . ' + ' . $this->value2 . ' ) / 3 = ';
18            return $str . ($this->value += $this->value2 += $value3 ) / 3;
19        }
20    }
21 }
22
23
24
25 class RerataNilai2 extends RerataNilai{
26     public function __construct($value, $value2){
27         parent::__construct($value, $value2);
28     }
29
30     public function average($value3 = 0){
31         return parent::average($value3);
32     }
33 }
34
35 ?>
```

Source code : CSS

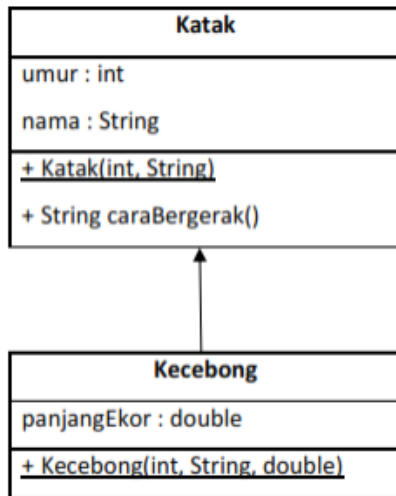
```
# prak4 no2.css X
# prak4 no2.css > .container
1 .container {
2     margin: auto;
3     text-align: center;
4     width: 650px;
5     height: 150px;
6     border-style: groove;
7 }
```

Output

Soal Nomor 2

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

3. Buat program berdasarkan UML berikut



Dan buat objek dengan karakteristik seperti tabel dibawah ini

Obyek	umur	nama	panjangEkor	caraBergerak
O1	5	Froggy		melompat
O2	2	Junior Frog	10	berenang

Source code : PHP

```

prak4 no3 index.php > ...
1  <!-- 21091397038 Ahmed Nur Sidik -->
2
3  <?php
4      require_once 'prak4 no3.php';
5  ?>
6
7  <html lang="id">
8  <head>
9      <link rel="stylesheet" type="text/css" href="prak4 no3.css">
10     <title>Praktikum 4</title>
11 </head>
12 <body>
13 <h2><center>Soal Nomor 3</center></h2>
14 <table align="center">
15
16 <tr align="center">
17     <thead>
18         <td>Objek</td>
19         <td>Umur</td>
20         <td>Nama</td>
21         <td>Panjang Ekor</td>
22         <td>Cara Bergerak</td>
23     </thead>
24 </tr>
25
26 <tbody>
27 <tr>
28     <td>O1</td>
29     <td><?=$katak->getUmur() ?> </td>
30     <td><?=$katak->getNama() ?> </td>
31     <td>-</td>
32     <td><?=$katak->carabergarak() ?> </td>
33 </tr>
34
35 <tr>
36     <td>O2</td>
37     <td><?=$kecebong->getUmur() ?></td>
38     <td><?=$kecebong->getNama() ?></td>
  
```

```

prak4 no3 index.php > ...
39     <td><?=$kecebong->getpanjangekor() ?></td>
40     <td><?=$kecebong->carabergarak() ?></td>
41 </tr>
42 </tbody>
43
44 </table>
45 </body>
46 </html>
  
```

```

prak4 no3.php
prak4 no3.php > ...
1  <!-- 21091397038 Ahmed Nur Sidik -->
2
3  <?php
4
5  class Katak{
6      protected $umur, $nama;
7      public function __construct($umur, $nama){
8          $this->umur = $umur;
9          $this->nama = $nama;
10     }
11     public function getUmur(){
12         return $this->umur;
13     }
14     public function getNama(){
15         return $this->nama;
16     }
17     public function caraBergerak(){
18         return 'Melompat';
19     }
20 }
21
22 class Kecebong extends Katak{
23     private $panjangEkor;
24     public function __construct($umur, $nama, $ekor){
25         $this->panjangEkor = $ekor;
26         parent::__construct($umur, $nama);
27     }
28     public function getpanjangekor(){
29         return $this->panjangEkor;
30     }
31     public function carabergarak(){
32         return 'Berenang';
33     }
34 }
35
36 $katak = new Katak(9, 'Kodok');
37 $kecebong = new Kecebong(5, 'Junior Kodok', 10);
38 ?>

```

Source code : CSS

```

# prak4 no3.css
# prak4 no3.css > thead
14     border: 1px solid;
15     padding: 8px 10px;
16 }
17
18 thead{
19     font-weight: bold;
20 }

```

Output

### Soal Nomor 3

Objek	Umur	Nama	Panjang Ekor	Cara Bergerak
01	9	Kodok	-	Melompat
02	5	Junior Kodok	10	Berenang