LAPORAN PRAKTIKUM 4

Kuliah Pemograman Berorientasi Obyek

Oleh :

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PROGRAM STUDI D4 MANAJEMEN INFORMATIKA
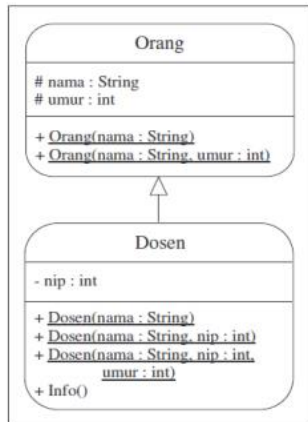
FAKULTAS VOKASI

UNIVERSITAS NEGERI SURABAYA

2022

Praktikum 4 PBO

1. Buatlah Program berdasarkan UML dibawah ini

Source Code

PHP


```php
<!-- 21091397028_Kania Meliana Fityanti -->

<!DOCTYPE html>
<html lang="en">
<head>
    <link rel="stylesheet" type="text/css" href="Nomor1.css">
    <title>Praktikum 4</title>
</head>
<body>
<div class="container">
<h2>Soal 1</h2>


<?php

    class Orang {
        protected $nama,$umur;
        public function __construct($nama,$umur){
        $this->nama = $nama;
        $this->umur = $umur;
        }
    }

    class Dosen extends Orang   {
        private $nip;
        public function __construct($nama, $umur, $nip) {
            $this->nip = $nip;
            parent::__construct($nama, $umur);
        }

        public function hasil() {
            return $this->nama . ' , umur ' . $this->umur. ' , NIP ' . $this->nip;
        }
```

```
phpNo2.php        index no2.php        index no3.php        phpNo3.php        Nomor1.php ×      #
```

C: > xampp > htdocs > PBO > Nomor1.php > ...

```php
30
31          public function hasil() {
32              return $this->nama . ' , umur ' . $this->umur. ' , NIP ' . $this->nip;
33          }
34      }
35
36      $dosen1 = new Dosen('Kania', 30, 21091397010);
37      $dosen2 = new Dosen('Liana', 39, 21091397160);
38      $dosen3 = new Dosen('Yanti', 48, 21091397139);
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
```

CSS

```
phpNo2.php        index no2.php        index no3.php        phpNo3.php        Nomor1.php        # No
```

C: > xampp > htdocs > PBO > # Nomor1.css > ...

```css
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  }
12
```

+ Output

<div style="border:1px solid black;">

Soal 1

Kania , umur 30 , NIP 21091397010

Liana , umur 39 , NIP 21091397160

Yanti , umur 48 , NIP 21091397139

</div>

+ Analisis

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

2. Buatlah Program berdasarkan UML dibawah ini

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

Source Code
🔸 PHP

```
phpNo2.php ×    index no2.php    index no3.php    phpNo3.php    Nomor1.php    # Nomor1.css    # Nomo

C: > Users > one > Downloads >  phpNo2.php > ...
   1   <!-- 21091397028_Kania Meliana Fityanti -->
   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
  17           } else {
  18               $str ='(' . $this->value . ' + ' . $this->value2 . ' + ' . $this->value2 . ') / 3 = ';
  19               return $str . ($this->value += $this->value2 += $value3 ) / 3;
  20           }
  21       }
  22   }
  23
```

```
phpNo2.php ×    index no2.php    index no3.php    phpNo3.php    Nomor1.php    #

C: > Users > one > Downloads >  phpNo2.php > ...
  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   ?>
```

phpNo2.php   index no2.php ✕   index no3.php   phpNo3.php   Nomor1.php   # Nomor1.css

C: > Users > one > Downloads > 🐘 index no2.php > ⬦ html > ⬦ head > ⬦ link

```php
1   <!-- 21091397028_Kania Meliana Fityanti -->
2   <?php
3       require_once 'phpNo2.php';
4   ?>
5   <html lang="id">
6   <head>
7       <link rel="stylesheet" href="Nomor2.css">
8       <title>Praktikum 4</title>
9   </head>
10  <body>
11  <div class="container">
12  <h2>Soal No.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>
```

```php
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>
```

✚ CSS

phpNo2.php   index no2.php   inde:

C: > Users > one > Downloads > # Nomor2.css >

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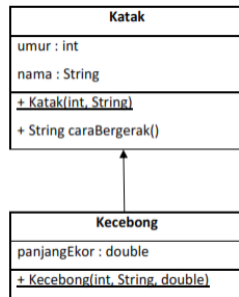
Output

Analisis

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

```
┌─────────────────────────────┐
│            Katak            │
├─────────────────────────────┤
│ umur : int                  │
│ nama : String               │
├─────────────────────────────┤
│ + Katak(int, String)        │
│ + String caraBergerak()     │
└─────────────────────────────┘
              △
              │
┌─────────────────────────────┐
│          Kecebong           │
├─────────────────────────────┤
│ panjangEkor : double        │
├─────────────────────────────┤
│ + Kecebong(int, String, double) │
└─────────────────────────────┘
```

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


```php
<!-- 21091397028_Kania Meliana Fityanti -->

<?php
    require_once 'phpNo3.php';
?>

<html lang="id">
<head>
    <link rel="stylesheet" type="text/css" href="Nomor3.css">
    <title>Praktikum 4</title>
</head>
<body>
<h2><center>Soal No.3</center></h2>
<table align="center">

<tr align="center">
    <thead>
    <td>Objek</td>
    <td>Umur</td>
    <td>Nama</td>
    <td>Panjang Ekor</td>
    <td>Cara Bergerak</td>
    </thead>
</tr>

<tbody>
<tr>
    <td>01</td>
    <td><?=$katak->getUmur() ?> </td>
    <td><?=$katak->getnama() ?> </td>
    <td>-</td>
    <td><?=$katak->carabergerak() ?> </td>
</tr>
```

ile   Edit   Selection   View   Go   Run   Terminal   Help

tricted Mode is intended for safe code browsing. Trust this window to enable all features.   M

🐘 phpNo2.php   🐘 index no2.php   🐘 index no3.php ✕   🐘 phpNo3

C: > Users > one > Downloads > 🐘 index no3.php > ⊘ html > ⊘ head > ⊘ link

```php
35    <tr>
36        <td>02</td>
37        <td><?=$kecebong->getUmur() ?></td>
38        <td><?=$kecebong->getNama() ?></td>
39        <td><?=$kecebong->getpanjangekor() ?></td>
40        <td><?=$kecebong->carabergerak() ?></td>
41    </tr>
42    </tbody>
43
44    </table>
45    </body>
46    </html>
```

le   Edit   Selection   View   Go   Run   Terminal   Help

tricted Mode is intended for safe code browsing. Trust this window to enable all features.   Ma

🐘 phpNo2.php   🐘 index no2.php   🐘 index no3.php   🐘 phpNo3.

C: > Users > one > Downloads > 🐘 phpNo3.php > ...

```php
1    <!-- 21091397028_Kania Meliana Fityanti -->
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 carabergerak(){
32           return 'Berenang';
33       }
```

ile Edit Selection View Go Run Terminal Help

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🐘 phpNo2.php   🐘 index no2.php   🐘 index no3.php   🐘 php

C: > Users > one > Downloads > 🐘 phpNo3.php > ...

```
32          return "Berenang";
33       }
34    }
35
36    $katak = new katak(7, 'Kodok');
37    $kecebong = new kecebong(8, 'Junior Kodok', 10);
38
39    ?>
```

➕ **CSS**

ile Edit Selection View Go Run Terminal Help

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🐘 phpNo2.php   🐘 index no2.php   🐘 index no3.pl

C: > Users > one > Downloads > # Nomor3.css > ...

```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

Objek	Umur	Nama	Panjang Ekor	Cara Bergerak
01	7	Kodok	-	Melompat
02	8	Junior Kodok	10	Berenang

➕ **Analisis**

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.