

**LAPORAN PBO**



**Oleh :**

**Aisyah Aqilah Rian Vania (21091397002)**

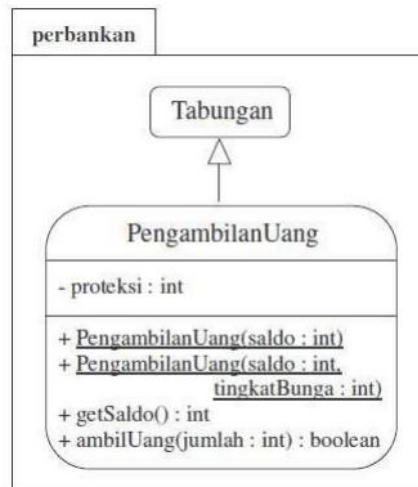
**Universitas Negeri Surabaya**

**Manajemen Informatika**

**2022**

# NO 1

1. Transformasikan UML class diagram dibawah ini kedalam program



Output yang dihasilkan harus seperti dibawah ini

```
Uang yang ditabung : 5000
Uang yang diproteksi : 1000
-----
Uang yang akan diambil : 4500 false
Saldo sekarang : 5000
-----
Uang yang akan diambil : 2500 true
Saldo sekarang : 2500
```

```
File Edit Selection View Go Run Terminal Help
PRAK_3_NO_1_002.php - Visual Studio Code

D: > xampp > htdocs > PBO > PRAK_3_NO_1_002.php
1 <!-- Aisyah Aqilah Rian Vania_21091397002_B2021 -->
2
3 <!DOCTYPE html>
4 <html lang="id">
5 <head>
6 <link rel="stylesheet" href="no1.css">
7 <title>Praktikum 3 No.1</title>
8 </head>
9 <body>
10 <div class="container">
11 <?php
12 class Tabungan {
13     protected $saldo;
14 }
15 class PengambilanUang extends Tabungan {
16     private $proteksi;
17
18     public function __construct($saldo)
19     {
20         $this->saldo=$saldo;
21         $this->proteksi = 1000;
22     }
23
24     public function getSaldo(){
25         return "Uang yang ditabung : " . $this->saldo . "<br> Uang yang diproteksi : " . $this->proteksi;
26     }
27
28     public function ambilUang($jumlah){
29         if($jumlah == 4500){
30             return "Uang yang akan diambil : " . $jumlah . " false <br> Saldo sekarang : " . $this->saldo;
```

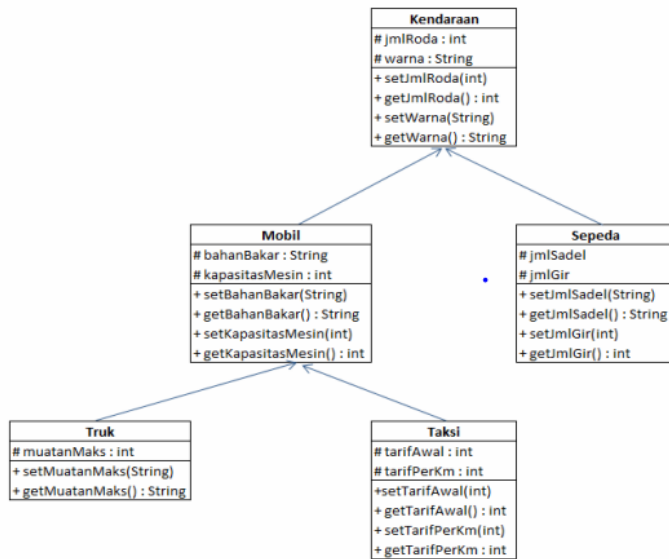
```
17
18
19 public function __construct($saldo)
20 {
21     $this->saldo=$saldo;
22     $this->proteksi = 1000;
23 }
24
25 public function getSaldo(){
26     return "Uang yang ditabung : " . $this->saldo . "<br> Uang yang diproteksi : " . $this->proteksi;
27 }
28
29 public function ambilUang($jumlah){
30     if($jumlah == 4500){
31         return "Uang yang akan diambil : " . $jumlah . " false <br> Saldo sekarang : " . $this->saldo;
32     }else{
33         return "Uang yang akan diambil : " . $jumlah . " true <br> Saldo sekarang : " . $this->saldo -= $jumlah;
34     }
35 }
36
37 $tabungan = new PengambilanUang(5000);
38 echo $tabungan->getSaldo();
39 echo "<br> ----- <br>";
40 echo $tabungan->ambilUang(4500);
41 echo "<br> ----- <br>";
42 echo $tabungan->ambilUang(2500);
43
44 ?>
45 </div>
46 </body>
47 </html>
```

## OUTPUT :

Uang yang ditabung : 5000  
Uang yang diproteksi : 1000  
-----  
Uang yang akan diambil : 4500 false  
Saldo sekarang : 5000  
-----  
Uang yang akan diambil : 2500 true  
Saldo sekarang : 2500

## NO 2.A

- a. Buatlah kelas-kelas berdasarkan UML class diagram dibawah ini!



```
File Edit Selection View Go Run Terminal Help PRAK 3_NO 2A_002.php - Visual Studio Code
PRAK 3_NO 1_002.php PRAK 3_NO 2A_002.php X PRAK 3_NO 2B_002.php
D: > xampp > htdocs > PBO > PRAK 3_NO 2A_002.php
1 <!-- Aisyah Aqilah Rian Vania_21091397002_B2021 --->
2
3 <?php
4
5 class Kendaraan {
6     protected $jmlRoda, $warna;
7     function setJmlRoda($jmlRoda) {
8         $this->jmlRoda = $jmlRoda;
9     }
10    public function getJmlRoda() {
11        return $this->jmlRoda;
12    }
13    public function setWarna($warna) {
14        $this->warna = $warna;
15    }
16    public function getWarna() {
17        return $this->warna;
18    }
19 }
20
21 class Mobil extends Kendaraan {
22     protected $bahanBakar, $kapasitasMesin;
23     public function setBahanBakar($bahanBakar) {
24         $this->bahanBakar = $bahanBakar;
25     }
26     public function getBahanBakar() {
27         return $this->bahanBakar;
28     }
29     public function setKapasitasMesin($kapasitasMesin) {
30         $this->kapasitasMesin = $kapasitasMesin;
31     }
32 }
```

```
File Edit Selection View Go Run Terminal Help PRAK_3_NO_2A_002.php - Visual Studio Code
D:\> xampp > htdocs > PBO > PRAK_3_NO_2A_002.php
29 public function setKapasitasMesin($kapasitasMesin) {
30     $this->kapasitasMesin = $kapasitasMesin;
31 }
32 public function getKapasitasMesin() {
33     return $this->kapasitasMesin;
34 }
35 }
36
37 class Sepeda extends Kendaraan {
38     protected $jmlSadel, $jmlGir;
39     public function setJmlSadel($jmlSadel) {
40         $this->jmlSadel = $jmlSadel;
41     }
42     public function getJmlSadel() {
43         return $this->jmlSadel;
44     }
45     public function setJmlGir($jmlGir) {
46         $this->jmlGir = $jmlGir;
47     }
48     public function getJmlGir() {
49         return $this->jmlGir;
50     }
51 }
52
53 class Truk extends Mobil {
54     private $muatanMaks;
55     public function setMuatanMaks($muatanMaks) {
56         $this->muatanMaks = $muatanMaks;
57     }
58     public function getMuatanMaks() {
```

```
File Edit Selection View Go Run Terminal Help PRAK_3_NO_2A_002.php - Visual Studio Code
D:\> xampp > htdocs > PBO > PRAK_3_NO_2A_002.php
57 }
58 public function getMuatanMaks() {
59     return $this->muatanMaks;
60 }
61 }
62
63 class Taksi extends Mobil {
64     private $tarifAwal, $tarifPerKm;
65     public function setTarifAwal($tarifAwal) {
66         $this->tarifAwal = $tarifAwal;
67     }
68     public function getTarifAwal() {
69         return $this->tarifAwal;
70     }
71     public function setTarifPerKm($tarifPerKm) {
72         $this->tarifPerKm = $tarifPerKm;
73     }
74     public function getTarifPerKm() {
75         return $this->tarifPerKm;
76     }
77 }
78
79 $truk1 = new Truk;
80 $truk1->setJmlRoda(4);
81 $truk1->setWarna('Kuning');
82 $truk1->setBahanBakar('Solar');
83 $truk1->setKapasitasMesin(1500);
84 $truk1->setMuatanMaks(1000);
85
86 $truk2 = new Truk;
```

The screenshot shows the Visual Studio Code editor with the file 'PRAK\_3\_NO\_2A\_002.php' open. The code defines two Truk objects, \$truk1 and \$truk2, and two Taksi objects, \$taksi1 and \$taksi2. The code is as follows:

```
78
79     $truk1 = new Truk;
80     $truk1->setJmlRoda(4);
81     $truk1->setWarna('Kuning');
82     $truk1->setBahanBakar('Solar');
83     $truk1->setKapasitasMesin(1500);
84     $truk1->setMuatanMaks(1000);
85
86     $truk2 = new Truk;
87     $truk2->setJmlRoda(6);
88     $truk2->setWarna('Merah');
89     $truk2->setBahanBakar('Solar');
90     $truk2->setKapasitasMesin(2000);
91     $truk2->setMuatanMaks(5000);
92
93     $taksi1 = new Taksi;
94     $taksi1->setJmlRoda(4);
95     $taksi1->setWarna('Oranye');
96     $taksi1->setBahanBakar('Bensin');
97     $taksi1->setKapasitasMesin(1500);
98     $taksi1->setTarifAwal(10000);
99     $taksi1->setTarifPerKm(5000);
100
101     $taksi2 = new Taksi;
102     $taksi2->setJmlRoda(4);
103     $taksi2->setWarna('Biru');
104     $taksi2->setBahanBakar('Bensin');
105     $taksi2->setKapasitasMesin(1300);
106     $taksi2->setTarifAwal(7000);
107     $taksi2->setTarifPerKm(3500);
```

The status bar at the bottom indicates 'Ln 1, Col 1', 'Spaces: 4', 'UTF-8', 'CRLF', 'PHP', and the date '20:53 23/09/2022'.

The screenshot shows the Visual Studio Code editor with the file 'PRAK\_3\_NO\_2A\_002.php' open. The code defines two Sepeda objects, \$sepeda1 and \$sepeda2, and two Taksi objects, \$taksi1 and \$taksi2. The code is as follows:

```
93     $taksi1 = new Taksi;
94     $taksi1->setJmlRoda(4);
95     $taksi1->setWarna('Oranye');
96     $taksi1->setBahanBakar('Bensin');
97     $taksi1->setKapasitasMesin(1500);
98     $taksi1->setTarifAwal(10000);
99     $taksi1->setTarifPerKm(5000);
100
101     $taksi2 = new Taksi;
102     $taksi2->setJmlRoda(4);
103     $taksi2->setWarna('Biru');
104     $taksi2->setBahanBakar('Bensin');
105     $taksi2->setKapasitasMesin(1300);
106     $taksi2->setTarifAwal(7000);
107     $taksi2->setTarifPerKm(3500);
108
109     $sepeda1 = new Sepeda;
110     $sepeda1->setJmlRoda(3);
111     $sepeda1->setWarna('Hitam');
112     $sepeda1->setJmlSadel(1);
113     $sepeda1->setJmlGir(2);
114
115     $sepeda2 = new Sepeda;
116     $sepeda2->setJmlRoda(2);
117     $sepeda2->setWarna('Putih');
118     $sepeda2->setJmlSadel(2);
119     $sepeda2->setJmlGir(5);
120
121     >>
```

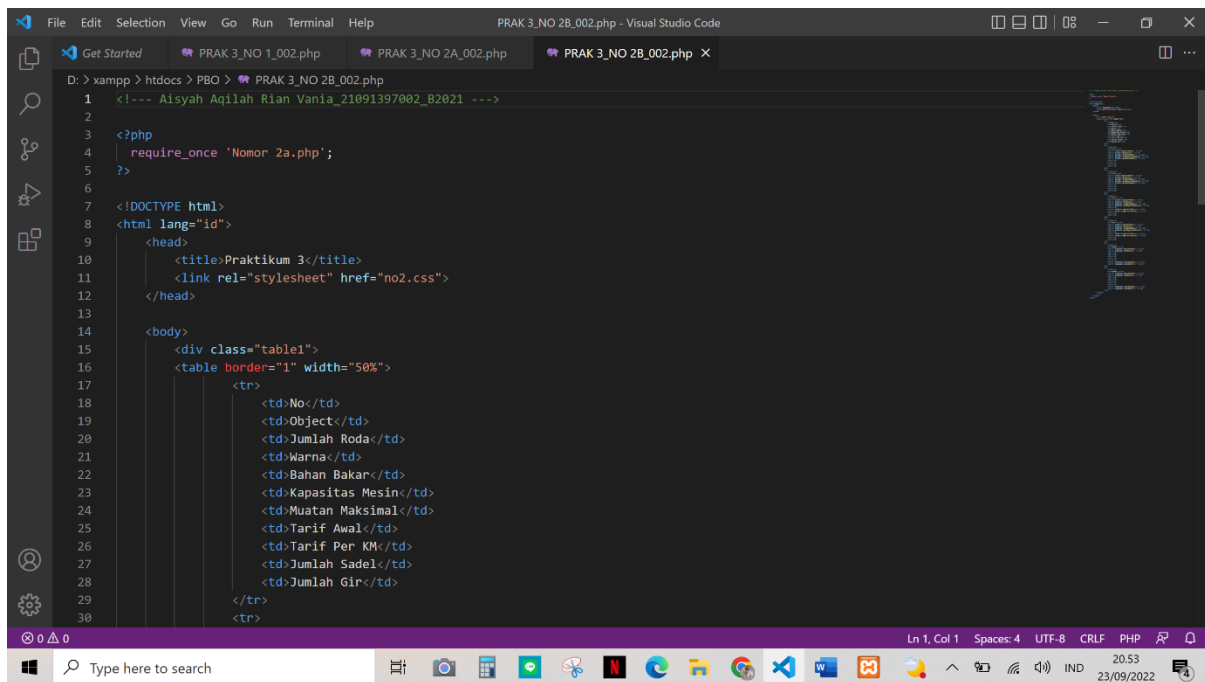
The status bar at the bottom indicates 'Ln 1, Col 1', 'Spaces: 4', 'UTF-8', 'CRLF', 'PHP', and the date '20:53 23/09/2022'.

## NO 2.B

- b. Selanjutnya buatlah kelas Tes.php yang membuat obyek-obyek serta mengeset nilai variabel seperti pada Tabel 1 dan tampilkan data per obyek.

**Tabel 1. Data obyek**

Obyek	jmlRoda	warna	bahanBakar	kapasitasMesin	muatanMaks	
truk1	4	kuning	solar	1500	1000	
truk2	6	merah	solar	2000	5000	
					tarifAwal	tarifPerKm
taksi1	4	oranye	bensin	1500	10000	5000
taksi1	4	biru	bensin	1300	7000	3500
			jmlSadel	jmlGir		
sepeda1	3	hitam	1	2		
sepeda2	2	putih	2	5		



```
1 <!-- Aisyah Aqilah Rian Vania_21091397002_B2021 -->
2
3
4 <?php
5     require_once 'Nomor 2a.php';
6 >?
7
8 <!DOCTYPE html>
9 <html lang="id">
10 <head>
11     <title>Praktikum 3</title>
12     <link rel="stylesheet" href="no2.css">
13 </head>
14 <body>
15     <div class="table1">
16         <table border="1" width="50%">
17             <tr>
18                 <td>No</td>
19                 <td>Object</td>
20                 <td>Jumlah Roda</td>
21                 <td>Warna</td>
22                 <td>Bahan Bakar</td>
23                 <td>Kapasitas Mesin</td>
24                 <td>Muatan Maksimal</td>
25                 <td>Tarif Awal</td>
26                 <td>Tarif Per KM</td>
27                 <td>Jumlah Sadel</td>
28                 <td>Jumlah Gir</td>
29             </tr>
30             <tr>
```

```
File Edit Selection View Go Run Terminal Help PRAK 3_NO 2B_002.php - Visual Studio Code
D: > xampp > htdocs > PBO > PRAK 3_NO 2B_002.php
30
31
32 <td>1</td>
33 <td>Truk 1</td>
34 <td><?= $truk1->getjmlRoda(); ?></td>
35 <td><?= $truk1->getWarna(); ?></td>
36 <td><?= $truk1->getBahanBakar(); ?></td>
37 <td><?= $truk1->getKapasitasMesin(); ?></td>
38 <td><?= $truk1->getMuatanMaks(); ?></td>
39 <td><?= $truk1->getTarifAwal(); ?></td>
40 <td><?= $truk1->getTarifPerKm(); ?></td>
41 <td><?= $truk1->getTarifPerKm(); ?></td>
42
43
44 <td>2</td>
45 <td>Truk 2</td>
46 <td><?= $truk2->getjmlRoda(); ?></td>
47 <td><?= $truk2->getWarna(); ?></td>
48 <td><?= $truk2->getBahanBakar(); ?></td>
49 <td><?= $truk2->getKapasitasMesin(); ?></td>
50 <td><?= $truk2->getMuatanMaks(); ?></td>
51 <td><?= $truk2->getTarifAwal(); ?></td>
52 <td><?= $truk2->getTarifPerKm(); ?></td>
53 <td><?= $truk2->getTarifPerKm(); ?></td>
54
55
56 <td>3</td>
57 <td>Taksi 1</td>
58 <td><?= $taksi1->getjmlRoda(); ?></td>
```

```
File Edit Selection View Go Run Terminal Help PRAK 3_NO 2B_002.php - Visual Studio Code
D: > xampp > htdocs > PBO > PRAK 3_NO 2B_002.php
56
57 <td>3</td>
58 <td>Taksi 1</td>
59 <td><?= $taksi1->getjmlRoda(); ?></td>
60 <td><?= $taksi1->getWarna(); ?></td>
61 <td><?= $taksi1->getBahanBakar(); ?></td>
62 <td><?= $taksi1->getKapasitasMesin(); ?></td>
63 <td><?= $taksi1->getTarifAwal(); ?></td>
64 <td><?= $taksi1->getTarifPerKm(); ?></td>
65 <td><?= $taksi1->getTarifPerKm(); ?></td>
66
67
68
69
70 <td>4</td>
71 <td>Taksi 2</td>
72 <td><?= $taksi2->getjmlRoda(); ?></td>
73 <td><?= $taksi2->getWarna(); ?></td>
74 <td><?= $taksi2->getBahanBakar(); ?></td>
75 <td><?= $taksi2->getKapasitasMesin(); ?></td>
76 <td><?= $taksi2->getTarifAwal(); ?></td>
77 <td><?= $taksi2->getTarifPerKm(); ?></td>
78 <td><?= $taksi2->getTarifPerKm(); ?></td>
79
80
81
82
83 <td>5</td>
84 <td>Sepeda 1</td>
85 <td><?= $sepeda1->getjmlRoda(); ?></td>
```



