

PEMROGRAMAN BERORIENTASI OBJEK

PRAKTIKUM 6

Ditulis Dalam Rangka Pemenuhan Ujian Tengah Semester Mata Kuliah Pemrograman Berorientasi Objek



Dosen Pengampu

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PROGRAM STUDI D4 MANAJEMEN INFORMATIKA

FAKULTAS VOKASI

UNIVERSITAS NEGERI SURABAYA

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1. Input :

no1.php

```
1  <?php
2
3  require_once 'abstrak.php';
4
5  class Truck extends Vehicle {
6      public function __construct($maxLoad, $name)
7      {
8          $this->maxLoad = $maxLoad;
9          $this->name = $name;
10     }
11
12     public function calcFuelNeeds()
13     {
14         $fuel = $this->calcFuelEfficiency();
15         $trip = $this->calcTripDistance();
16
17         return ceil($fuel / $trip);
18     }
19 }
20
21 class RiverBarge extends Vehicle {
22     public function __construct($maxLoad, $name)
23     {
24         $this->maxLoad = $maxLoad;
25         $this->name = $name;
26     }
27
28     public function calcFuelNeeds()
29     {
30         $fuel = $this->calcFuelEfficiency();
31         $trip = $this->calcTripDistance();
32
33         return ceil($fuel / $trip);
```

```
9         $this->name = $name;
10     }
11
12     public function calcFuelNeeds()
13     {
14         $fuel = $this->calcFuelEfficiency();
15         $trip = $this->calcTripDistance();
16
17         return ceil($fuel / $trip);
18     }
19 }
20
21 class RiverBarge extends Vehicle {
22     public function __construct($maxLoad, $name)
23     {
24         $this->maxLoad = $maxLoad;
25         $this->name = $name;
26     }
27
28     public function calcFuelNeeds()
29     {
30         $fuel = $this->calcFuelEfficiency();
31         $trip = $this->calcTripDistance();
32
33         return ceil($fuel / $trip);
34     }
35 }
36 $truck = new Truck(10000, 'Truk');
37 $riverBarge = new RiverBarge(12000, 'Perahu');
```

Index.php

```
1  <?php
2      require_once 'no1.php';
3  ?>
4
5  <!DOCTYPE html>
6  <html lang="id">
7
8  <head>
9      <!-- Bootstrap CSS -->
10     <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet"
11         integrity="sha384-1BmE4kWBq78iYhFtdvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3" crossorigin="anonymous">
12
13     <title>Praktikum 6</title>
14 </head>
15
16 <body>
17     <div class="container">
18         <br>
19         <div class="row">
20             <div class="col-5 mx-auto border p-3 mt-2">
21                 <h4 class="text-center"><strong>No.1</strong></h4>
22                 <br><br>
23                 <b><?=$truck->getMaxLoad() . ' kg'; ?> <br></b>
24                 <br>
25                 <?=$truck->addBox(5000) . ' kg'; ?> <br>
26                 <?=$truck->addBox(2000) . ' kg'; ?> <br>
27                 <?=$truck->addBox(3000) . ' kg'; ?> <br>
28
29                 <?php
30                     echo "Butuh Bahan Bakar sebanyak " . $truck->calcFuelNeeds() . ' Liter'. '<br>';
31                 ?>
32                 <br>
33             </div>
34             <div class="col-5 mx-auto border p-3 mt-2">
35                 <br><br>
36                 <b><?=$riverBarge->getMaxLoad() . ' kg'; ?> <br></b>
37                 <br>
38                 <?=$riverBarge->addBox(5000) . ' kg'; ?> <br>
39                 <?=$riverBarge->addBox(6000) . ' kg'; ?> <br>
40                 <?=$riverBarge->addBox(1000) . ' kg'; ?> <br>
41
42                 <?php
43                     echo "Butuh Bahan Bakar sebanyak " . $riverBarge->calcFuelNeeds() . ' Liter';
44                 ?>
45             </div>
46         </div>
47     </div>
48 </body>
49
50 </html>
```

Abstrak.php

```
1  <?php
2
3  abstract class Vehicle {
4      private $load = 0;
5      protected $maxLoad = 0, $name;
6
7      protected function __construct($maxLoad, $name) {
8          $this->$maxLoad = $maxLoad;
9          $this->$name = $name;
10     }
11
12     public function getLoad() {
13         return $this->load;
14     }
15
16     public function getMaxLoad() {
17         echo 'Maksimal muatan ' . $this->name . ' ' ;
18         return $this->maxLoad;
19     }
20
21     public function addBox($weight) {
22         if ($this->load >= $this->maxLoad) {
23             echo "$this->name menambah muatan sebesar $weight <br>";
24             echo 'Muatan telah penuh tidak bisa menambah lagi';
25         }else {
26             $this->load += $weight;
27             echo "$this->name menambah muatan sebesar $weight";
28         }
29     }
30
31     abstract public function calcFuelNeeds();
32
33     protected function calcFuelEfficiency() {
```

```
12     public function getLoad() {
13         return $this->load;
14     }
15
16     public function getMaxLoad() {
17         echo 'Maksimal muatan ' . $this->name . ' ' ;
18         return $this->maxLoad;
19     }
20
21     public function addBox($weight) {
22         if ($this->load >= $this->maxLoad) {
23             echo "$this->name menambah muatan sebesar $weight <br>";
24             echo 'Muatan telah penuh tidak bisa menambah lagi';
25         }else {
26             $this->load += $weight;
27             echo "$this->name menambah muatan sebesar $weight";
28         }
29     }
30
31     abstract public function calcFuelNeeds();
32
33     protected function calcFuelEfficiency() {
34         $range = 50000000;
35         $range /= $this->load;
36         return $range;
37     }
38
39     protected function calcTripDistance() {
40         return 500;
41     }
42 }
```

Output :

No.1

Maksimal muatan Truk 10000 kg

Truk menambah muatan sebesar 5000 kg
Truk menambah muatan sebesar 2000 kg
Truk menambah muatan sebesar 3000 kg
Butuh Bahan Bakar sebanyak 10 Liter

Maksimal muatan Perahu 12000 kg

Perahu menambah muatan sebesar 5000 kg
Perahu menambah muatan sebesar 6000 kg
Perahu menambah muatan sebesar 1000 kg
Butuh Bahan Bakar sebanyak 9 Liter

2. Input :

Index.php

```
index.php > html > head
1  <?php
2      require_once 'no2.php';
3  ?>
4
5  <!DOCTYPE html>
6  <html lang="en">
7
8  <head>
9      <!-- Bootstrap CSS -->
10     <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet"
11         integrity="sha384-1BmE4kqBq781YhF1dvKuhfTAU6auU8tT94MrHftjDbrCEXSU1oBoqy12QvZ6jIM3" crossorigin="anonymous">
12
13     <title>Praktikum 6.2</title>
14 </head>
15
16 <body>
17     <div class="container">
18         <br>
19         <div class="row">
20             <div class="col-5 mx-auto border p-3 mt-2">
21                 <h4 class="text-center"><strong>No.2</strong></h4>
22                 <br><br>
23                 <b><?php
24                     echo "Superman";
25                 ?></b><br>
26                 <?=> $superman->land(); ?> <br>
27                 <?=> $superman->takeOff(); ?> <br>
28                 <?=> $superman->fly(); ?> <br>
29                 <?=> $superman->leapBuilding(); ?> <br>
30                 <?=> $superman->stopBullet(); ?> <br>
31                 <br>
32                 <b><?php
33                     echo "Bird";
```

```

22         <br><br>
23         <b><?php
24             echo "Superman";
25             ?></b> <br>
26         <?=$superman->land(); ?> <br>
27         <?=$superman->takeOff(); ?> <br>
28         <?=$superman->fly(); ?> <br>
29         <?=$superman->leapBuilding(); ?> <br>
30         <?=$superman->stopBullet(); ?> <br>
31         <br>
32         <b><?php
33             echo "Bird";
34             ?></b> <br>
35         <?=$bird->buildNest(); ?> <br>
36         <?=$bird->takeOff(); ?> <br>
37         <?=$bird->fly(); ?> <br>
38         <?=$bird->land(); ?> <br>
39         <?=$bird->layEggs(); ?> <br>
40         <br>
41         <b><?php
42             echo "Airplane";
43             ?></b> <br>
44         <?=$airplane->takeOff(); ?> <br>
45         <?=$airplane->fly(); ?> <br>
46         <?=$airplane->land(); ?> <br>
47         </div>
48     </div>
49 </body>
50 </html>
51
52 </html>

```

Layer.php

```

1  <?php
2
3  interface Flyer {
4      public function takeOff();
5      public function land();
6      public function fly();
7  }
8
9  interface Sailer {
10     public function dock();
11     public function cruise();
12 }

```

No2.php

```

1  <?php
2
3  require_once 'layer.php';
4
5  class Airplane implements Flyer {
6      public function takeOff() {
7          return 'Pesawat meninggalkan Bandara';
8      }
9
10     public function land() {
11         return 'Pesawat mendarat menuju Bandara terdekat';
12     }
13
14     public function fly() {
15         return 'Pesawat menerjang Badai';
16     }
17 }
18
19 class Bird implements Flyer {
20     public function takeOff() {
21         return 'Burung menghindari Pemburu';
22     }
23
24     public function land() {
25         return 'Burung kembali ke sarangnya';
26     }
27
28     public function fly() {
29         return 'Burung mengejar mangsanya di langit';
30     }
31
32     public function buildNest() {
33         return 'Burung membuat sarang';
34     }
35 }

```

```

33     return burung membuat sarang ;
34 }
35
36 public function layEggs() {
37     return 'Burung bertelur';
38 }
39 }
40
41 class Superman implements Flyer {
42     public function takeOff() {
43         return 'Superman menyelamatkan orang terjatuh dari gedung tinggi';
44     }
45
46     public function land() {
47         return 'Superman menghentikan kecelakaan lalu lintas';
48     }
49
50     public function fly() {
51         return 'Superman terbang menuju ke markas utama musuh';
52     }
53
54     public function leapBuilding() {
55         return 'Superman melompat antara gedung satu ke gedung yang lainnya';
56     }
57
58     public function stopBullet() {
59         return 'Superman ditembaki pencuri namun dihindari';
60     }
61 }
62
63 $airplane = new Airplane;
64 $bird = new Bird;
65 $superman = new Superman;

```

Output :

No.2

Superman

Superman menghentikan kecelakaan lalu lintas
 Superman menyelamatkan orang terjatuh dari gedung tinggi
 Superman terbang menuju ke markas utama musuh
 Superman melompat antara gedung satu ke gedung yang lainnya
 Superman ditembaki pencuri namun dihindari

Bird

Burung membuat sarang
 Burung menghindari Pemburu
 Burung mengejar mangsanya di langit
 Burung kembali ke sarangnya
 Burung bertelur

Airplane

Pesawat meninggalkan Bandara
 Pesawat menerjang Badai
 Pesawat mendarat menuju Bandara terdekat

3. Input :

Abstrak.php

```
1 <?php
2
3 abstract class Vehicle {
4     private $load = 0;
5     protected $maxLoad = 0, $name;
6
7     protected function __construct($maxLoad, $name) {
8         $this->$maxLoad = $maxLoad;
9         $this->$name = $name;
10    }
11
12    public function getLoad() {
13        return $this->load;
14    }
15
16    public function getMaxLoad() {
17        echo 'Maksimal muatan ' . $this->name . ' ' ;
18        return $this->maxLoad;
19    }
20
21    public function addBox($weight) {
22        if ($this->load >= $this->maxLoad) {
23            echo "$this->name menambah muatan sebesar $weight <br>";
24            echo 'Muatan telah penuh tidak bisa menambah lagi';
25        }else {
26            $this->load += $weight;
27            echo "$this->name menambah muatan sebesar $weight";
28        }
29    }
30
31    abstract public function calcFuelNeeds();
32
33    protected function calcFuelEfficiency() {
```

```
14    }
15
16    public function getMaxLoad() {
17        echo 'Maksimal muatan ' . $this->name . ' ' ;
18        return $this->maxLoad;
19    }
20
21    public function addBox($weight) {
22        if ($this->load >= $this->maxLoad) {
23            echo "$this->name menambah muatan sebesar $weight <br>";
24            echo 'Muatan telah penuh tidak bisa menambah lagi';
25        }else {
26            $this->load += $weight;
27            echo "$this->name menambah muatan sebesar $weight";
28        }
29    }
30
31    abstract public function calcFuelNeeds();
32
33    protected function calcFuelEfficiency() {
34        $range = 50000000;
35        $range /= $this->load;
36        return $range;
37    }
38
39    protected function calcTripDistance() {
40        return 500;
41    }
42 }
```

Index.php

```
1 <?php
2     require_once 'no3.php';
3 ?>
4
5 <!DOCTYPE html>
6 <html lang="id">
7
8 <head>
9     <!-- Bootstrap CSS -->
10    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet"
11        integrity="sha384-18mE4kbBq781YhF1dvkuhFTAU6auU8t194WrHftjDbrCEXSU1oBoqyl2QvZ6jIM3" crossorigin="anonymous">
12
13    <title>Praktikum 6</title>
14 </head>
15 <body>
16     <div class="container">
17         <div class="row">
18             <div class="col-5 mx-auto border p-3 mt-2">
19                 <h4 class="text-center"><strong>No.3</strong></h4>
20                 <br><br>
21                 <?=$puma->home(); ?> <br>
22                 <?=$manusia->home(); ?> <br>
23                 <br>
24
25                 <b><?=$airplane2->getMaxLoad() . ' kg'; ?> <br></b>
26                 <?=$airplane2->addBox(2000) . ' kg'; ?> <br>
27                 <?=$airplane2->addBox(3000) . ' kg'; ?> <br>
28                 <?=$airplane2->addBox(7000) . ' kg'; ?> <br>
29                 <?=$airplane2->addBox(3000) . ' kg'; ?> <br>
30                 <?=$airplane2->takeOff(); ?> <br>
31                 <?=$airplane2->fly(); ?> <br>
32                 <?=$airplane2->land(); ?> <br>
33             </div>
19
```



```

22         <?=$manusia->home(); ?> <br>
23     <br>
24
25     <b><?=$airplane2->getMaxLoad() . ' kg'; ?> <br></b>
26     <?=$airplane2->addBox(2000) . ' kg'; ?> <br>
27     <?=$airplane2->addBox(3000) . ' kg'; ?> <br>
28     <?=$airplane2->addBox(7000) . ' kg'; ?> <br>
29     <?=$airplane2->addBox(3000) . ' kg'; ?> <br>
30     <?=$airplane2->takeOff(); ?> <br>
31     <?=$airplane2->fly(); ?> <br>
32     <?=$airplane2->land(); ?> <br>
33
34     <?php
35         echo "Butuh Bahan Bakar sebanyak " . $airplane2->calcFuelNeeds() . ' Liter'. '<br>';
36     ?>
37     <br>
38     <?=$superman2->home(); ?> <br>
39     <?=$superman2->land(); ?> <br>
40     <?=$superman2->takeOff(); ?> <br>
41     <?=$superman2->fly(); ?> <br>
42     <?=$superman2->leapBuilding(); ?> <br>
43     <?=$superman2->stopBullet(); ?> <br>
44 </div>
45 </div>
46 </div>
47 </body>
48
49 </html>

```

Layer.php

```

1  <?php
2
3  interface Flyer {
4      public function takeOff();
5      public function land();
6      public function fly();
7  }
8
9  interface Sailer {
10     public function dock();
11     public function cruise();
12 }

```

No3.php

```

1  <?php
2
3  require_once 'abstrak.php';
4  require_once 'layer.php';
5
6  class Animal
7  {
8      protected $name;
9
10     public function __construct($name)
11     {
12         $this->name = $name;
13     }
14
15     public function home()
16     {
17         return $this->name . ' kembali pulang';
18     }
19 }
20
21 class Manusia2 extends Animal {}
22
23 class Airplane2 extends Vehicle implements Flyer
24 {
25     public function __construct($maxLoad, $name)
26     {
27         $this->maxLoad = $maxLoad;
28         $this->name = $name;
29     }
30
31     public function takeOff()
32     {
33         return "<?=$this->name mengggalkan Bandara";

```

```

32     {
33         return "$this->name meninggalkan Bandara";
34     }
35
36     public function land()
37     {
38         return "$this->name mendarat menuju Bandara terdekat";
39     }
40
41     public function fly()
42     {
43         return "$this->name menerjang Badai";
44     }
45
46     public function calcFuelNeeds()
47     {
48         $fuel = $this->calcFuelEfficiency();
49         $trip = $this->calcTripDistance();
50
51
52
53         return ceil($fuel / $trip);
54     }
55 }
56
57 class Superman2 extends Manusia2 implements Flyer
58 {
59     public function takeOff()
60     {
61         return "$this->name menyelamatkan orang terjatuh dari gedung tinggi";
62     }
63
64     public function land()

```

```

57 class Superman2 extends Manusia2 implements Flyer
58 {
59     public function takeOff()
60     {
61         return "$this->name menyelamatkan orang terjatuh dari gedung tinggi";
62     }
63
64     public function land()
65     {
66         return "$this->name menghentikan kecelakaan lalu lintas";
67     }
68
69     public function fly()
70     {
71         return "$this->name terbang menuju ke markas utama musuh";
72     }
73
74     public function leapBuilding()
75     {
76         return "$this->name melompat antara gedung satu ke gedung yang lainnya";
77     }
78
79     public function stopBullet()
80     {
81         return "$this->name ditembaki pencuri namun dihindari";
82     }
83 }
84
85 $puma = new Animal('Kenari');
86 $manusia = new Manusia2('John');
87 $airplane2 = new Airplane2(15000, 'Garuda Indonesia');
88 $superman2 = new Superman2('Superman');

```

Output :

No.3

Kenari kembali pulang
John kembali pulang

Maksimal muatan Garuda Indonesia 15000 kg
Garuda Indonesia menambah muatan sebesar 2000 kg
Garuda Indonesia menambah muatan sebesar 3000 kg
Garuda Indonesia menambah muatan sebesar 7000 kg
Garuda Indonesia menambah muatan sebesar 3000 kg
Garuda Indonesia meninggalkan Bandara
Garuda Indonesia menerjang Badai
Garuda Indonesia mendarat menuju Bandara terdekat
Butuh Bahan Bakar sebanyak 7 Liter

Superman kembali pulang
Superman menghentikan kecelakaan lalu lintas
Superman menyelamatkan orang terjatuh dari gedung tinggi
Superman terbang menuju ke markas utama musuh
Superman melompat antara gedung satu ke gedung yang lainnya
Superman ditembak pencuri namun dihindari

4. Input :

Abstrak.php

```
1  <?php |
2
3  abstract class Vehicle {
4      private $load = 0;
5      protected $maxLoad = 0, $name;
6
7      protected function __construct($maxLoad, $name) {
8          $this->$maxLoad = $maxLoad;
9          $this->$name = $name;
10     }
11
12     public function getLoad() {
13         return $this->load;
14     }
15
16     public function getMaxLoad() {
17         echo 'Maksimal muatan ' . $this->name . ' ' ;
18         return $this->maxLoad;
19     }
20
21     public function addBox($weight) {
22         if ($this->load >= $this->maxLoad) {
23             echo "$this->name menambah muatan sebesar $weight <br>";
24             echo 'Muatan telah penuh tidak bisa menambah lagi';
25         }else {
26             $this->load += $weight;
27             echo "$this->name menambah muatan sebesar $weight";
28         }
29     }
30
31     abstract public function calcFuelNeeds();
32
33     protected function calcFuelEfficiency() {
```

```
11
12     public function getLoad() {
13         return $this->load;
14     }
15
16     public function getMaxLoad() {
17         echo 'Maksimal muatan ' . $this->name . ' ' ;
18         return $this->maxLoad;
19     }
20
21     public function addBox($weight) {
22         if ($this->load >= $this->maxLoad) {
23             echo "$this->name menambah muatan sebesar $weight <br>";
24             echo 'Muatan telah penuh tidak bisa menambah lagi';
25         }else {
26             $this->load += $weight;
27             echo "$this->name menambah muatan sebesar $weight";
28         }
29     }
30
31     abstract public function calcFuelNeeds();
32
33     protected function calcFuelEfficiency() {
34         $range = 50000000;
35         $range /= $this->load;
36         return $range;
37     }
38
39     protected function calcTripDistance() {
40         return 500;
41     }
42 }
```

Index.php

```
1 <?php
2     require_once 'no4.php';
3 ?>
4
5 <!DOCTYPE html>
6 <html lang="en">
7
8 <head>
9     <!-- Bootstrap CSS -->
10    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet"
11        integrity="sha384-18ME4kWBq78iYhF1dvKuhfTAU6auU8tT94W/HfjDbrCEXU10Boqy12QvZ6jIW3" crossorigin="anonymous">
12
13    <title>Praktikum 6</title>
14 </head>
15 <body>
16     <div class="container">
17         <div class="row">
18             <div class="text-center"><strong>No.4</strong></div>
19             <br><br>
20             <div class="col-4 mx-auto border p-2 mt-2">
21                 <b><?= $riverBarge2->getMaxLoad() . ' kg'; ?> <br></b>
22                 <?= $riverBarge2->addBox(7000) . ' kg'; ?> <br>
23                 <?= $riverBarge2->addBox(1000) . ' kg'; ?> <br>
24                 <?= $riverBarge2->addBox(4000) . ' kg'; ?> <br>
25                 <?= $riverBarge2->addBox(3000) . ' kg'; ?> <br>
26                 <?= $riverBarge2->dock(); ?> <br>
27                 <?= $riverBarge2->cruise(); ?> <br>
28                 <?php
29                     echo "Butuh Bahan Bakar sebanyak " . $riverBarge2->calcFuelNeeds() . ' Liter'. '<br>';
30                 ?>
31             </div>
32             <div class="col-4 mx-auto border p-2 mt-2">
33                 <b><?= $seaPlane->getMaxLoad() . ' kg'; ?> <br></b>
34                 <?= $seaPlane->cruise(); ?> <br>
35                 <?= $seaPlane->takeOff(); ?> <br>
36                 <?= $seaPlane->fly(); ?> <br>
37                 <?= $seaPlane->land(); ?> <br>
38                 <?php
39                     echo "Butuh Bahan Bakar sebanyak " . $seaPlane->calcFuelNeeds() . ' Liter'. '<br>';
40                 ?>
41             </div>
42             <div class="col mx-auto border p-2 mt-2">
43                 <b><?= $helicopter->getMaxLoad() . ' kg'; ?> <br></b>
44                 <?= $helicopter->addBox(3000) . ' kg'; ?> <br>
45                 <?= $helicopter->addBox(2000) . ' kg'; ?> <br>
46                 <?= $helicopter->takeOff(); ?> <br>
47                 <?= $helicopter->fly(); ?> <br>
48                 <?= $helicopter->land(); ?> <br>
49                 <?php
50                     echo "Butuh Bahan Bakar sebanyak " . $helicopter->calcFuelNeeds() . ' Liter'. '<br>';
51                 ?>
52             </div>
53         </div>
54     </div>
55 </body>
56 </html>
```

Layer.php

```
1 <?php
2
3 interface Flyer {
4     public function takeOff();
5     public function land();
6     public function fly();
7 }
8
9 interface Sailer {
10     public function dock();
11     public function cruise();
12 }
```

No4.php

```
1  <?php
2
3  require_once 'abstrak.php';
4  require_once 'layer.php';
5
6  class RiverBarge2 extends Vehicle implements Sailer {
7      public function __construct($maxLoad, $name) {
8          $this->maxLoad = $maxLoad;
9          $this->name = $name;
10     }
11
12     public function calcFuelNeeds() {
13         $fuel = $this->calcFuelEfficiency();
14         $trip = $this->calcTripDistance();
15
16         return ceil($fuel /= $trip);
17     }
18
19     public function dock() {
20         return $this->name . ' berada di dermaga';
21     }
22
23     public function cruise() {
24         return $this->name . ' berlayar menuju lautan';
25     }
26 }
27
28 class Airplane2 implements Flyer {
29     public function takeOff() {
30         return 'Pesawat meninggalkan Bandara';
31     }
32     public function land() {
33         return 'Pesawat mendarat ke Bandara terdekat';
34     }
35     public function fly() {
36         return 'Pesawat menerjang badai';
37     }
38 }
39
40 class SeaPlane extends Vehicle implements Sailer {
41     public function __construct($maxLoad, $name) {
42         $this->maxLoad = $maxLoad;
43         $this->name = $name;
44     }
45
46     public function calcFuelNeeds() {
47         $fuel = $this->calcFuelEfficiency();
48         $trip = $this->calcTripDistance();
49
50         return ceil($fuel /= $trip);
51     }
52
53     public function dock() {
54         return $this->name . ' berada di dermaga';
55     }
56
57     public function cruise() {
58         return $this->name . ' berlayar menuju lautan';
59     }
60
61     public function takeOff() {
62         return $this->name . ' meninggalkan Bandara';
63     }
64 }
```

```

64
65     public function land() {
66         return $this->name . ' mendarat ke Bandara terdekat';
67     }
68
69     public function fly() {
70         return $this->name . ' menerjang badai';
71     }
72 }
73
74 class Helicopter extends Vehicle {
75     public function __construct($maxLoad, $name) {
76         $this->maxLoad = $maxLoad;
77         $this->name = $name;
78     }
79
80     public function calcFuelNeeds() {
81         $fuel = $this->calcFuelEfficiency();
82         $trip = $this->calcTripDistance();
83
84         return ceil($fuel / $trip);
85     }
86     public function takeOff() {
87         return $this->name . ' meninggalkan Bandara';
88     }
89
90     public function land() {
91         return $this->name . ' mendarat ke Bandara terdekat';
92     }
93
94     public function fly() {
95         return $this->name . ' menerjang badai';
96     }

```

```

80     public function calcFuelNeeds() {
81         $fuel = $this->calcFuelEfficiency();
82         $trip = $this->calcTripDistance();
83
84         return ceil($fuel / $trip);
85     }
86     public function takeOff() {
87         return $this->name . ' meninggalkan Bandara';
88     }
89
90     public function land() {
91         return $this->name . ' mendarat ke Bandara terdekat';
92     }
93
94     public function fly() {
95         return $this->name . ' menerjang badai';
96     }
97 }
98
99 $riverBarge2 = new RiverBarge2(15000, 'RMS Titanic');
100 $seaPlane = new SeaPlane(10000, 'Boeing');
101 $helicopter = new Helicopter(5000, 'Little Bird');

```

Output :

No.4

Maksimal muatan RMS Titanic 15000 kg RMS Titanic menambah muatan sebesar 7000 kg RMS Titanic menambah muatan sebesar 1000 kg RMS Titanic menambah muatan sebesar 4000 kg RMS Titanic menambah muatan sebesar 3000 kg RMS Titanic berada di dermaga RMS Titanic berlayar menuju lautan Butuh Bahan Bakar sebanyak 7 Liter	Maksimal muatan Boeing 10000 kg Boeing menambah muatan sebesar 2000 kg Boeing menambah muatan sebesar 8000 kg Boeing berada di dermaga Boeing berlayar menuju lautan Boeing meninggalkan Bandara Boeing menerjang badai Boeing mendarat ke Bandara terdekat Butuh Bahan Bakar sebanyak 10 Liter	Maksimal muatan Little Bird 5000 kg Little Bird menambah muatan sebesar 3000 kg Little Bird menambah muatan sebesar 2000 kg Little Bird meninggalkan Bandara Little Bird menerjang badai Little Bird mendarat ke Bandara terdekat Butuh Bahan Bakar sebanyak 20 Liter
--	--	--