

PROJECT OBJECT ORIENTED PROGRAMMING

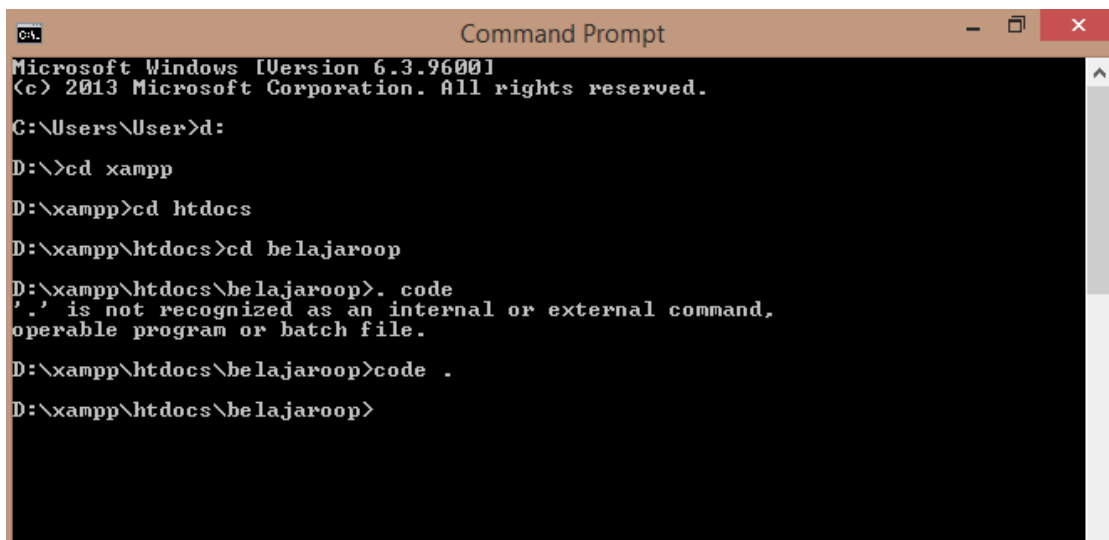
(PEMROGRAMAN BERORIENTASI OBJEK)



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NISN. 0071381226

REKAYASA PERANGKAT LUNAK
SMK NEGERI 1 KARANG BARU
PEMERINTAH PROVINSI ACEH
2025

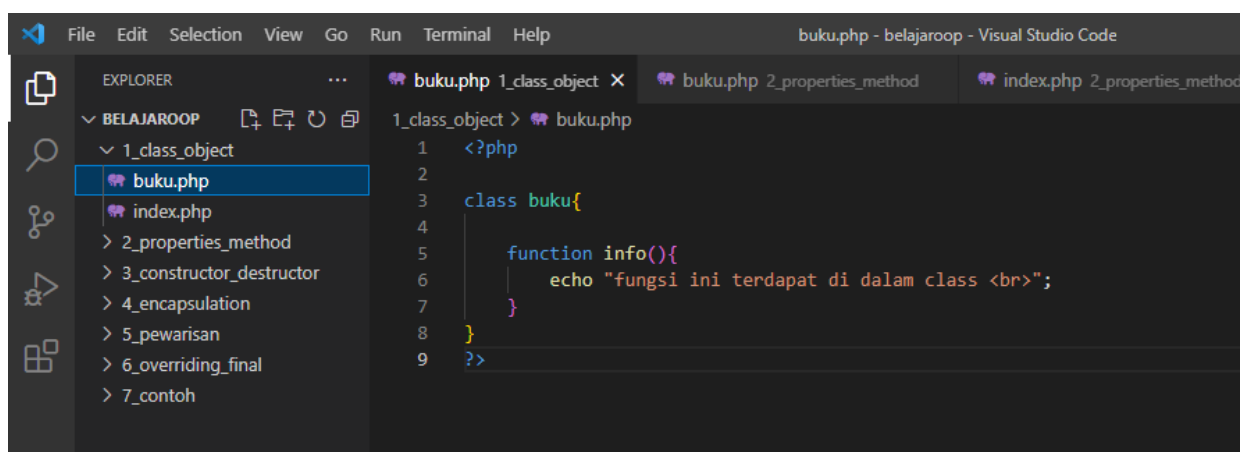
a. Apa itu OOP?



```
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Users\User>cd
D:\>cd xampp
D:\xampp>cd htdocs
D:\xampp\htdocs>cd belajaroop
D:\xampp\htdocs\belajaroop>. code
'.' is not recognized as an internal or external command,
operable program or batch file.
D:\xampp\htdocs\belajaroop>code .
D:\xampp\htdocs\belajaroop>
```

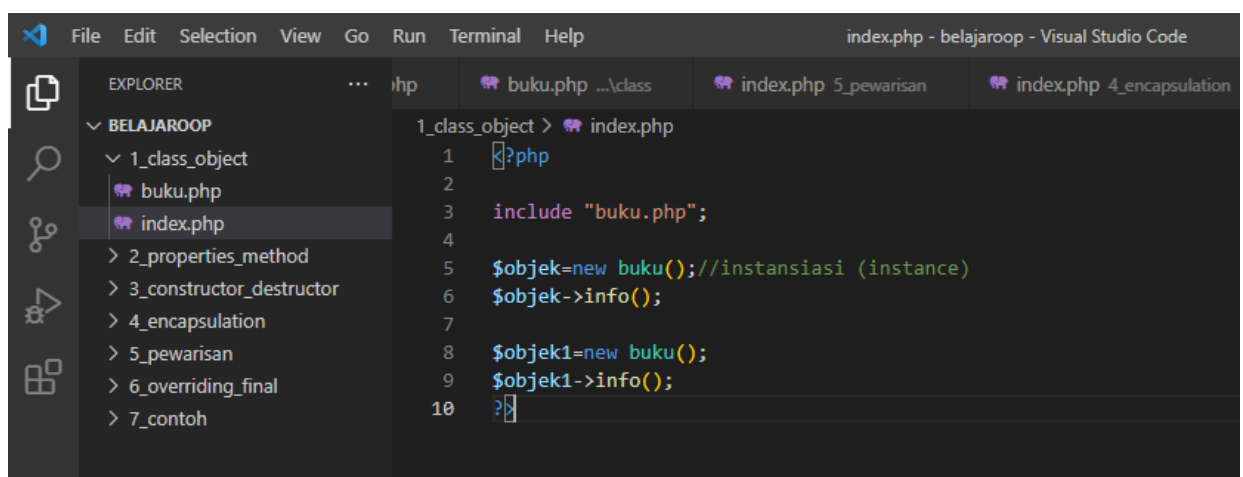
1. Class dan objek



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

EXPLORER
BELAJAROOOP
  1_class_object
    buku.php
    index.php
  > 2_properties_method
  > 3_constructor_destructor
  > 4_encapsulation
  > 5_pewarisan
  > 6_overriding_final
  > 7_contoh

1_class_object > buku.php
1 <?php
2
3 class buku{
4
5     function info(){
6         echo "fungsi ini terdapat di dalam class <br>";
7     }
8 }
9 ?>
```

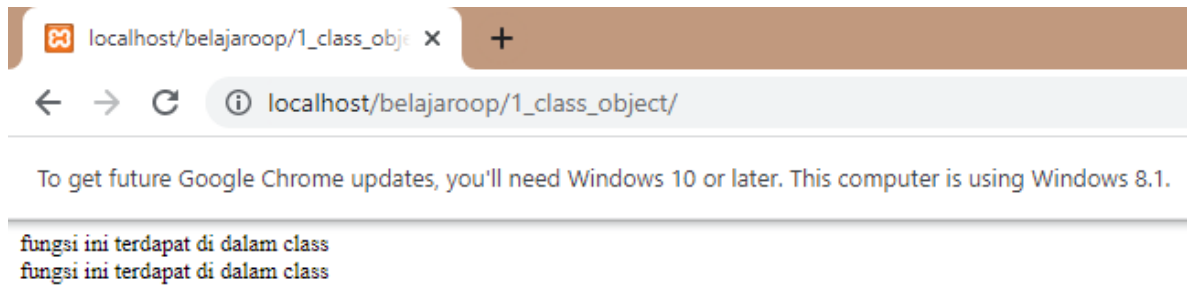


```
File Edit Selection View Go Run Terminal Help
index.php - belajaroop - Visual Studio Code

EXPLORER
BELAJAROOOP
  1_class_object
    buku.php
    index.php
  > 2_properties_method
  > 3_constructor_destructor
  > 4_encapsulation
  > 5_pewarisan
  > 6_overriding_final
  > 7_contoh

1_class_object > index.php
1 <?php
2
3 include "buku.php";
4
5 $objek=new buku();//instansiasi (instance)
6 $objek->info();
7
8 $objek1=new buku();
9 $objek1->info();
10 ?>
```

Output:

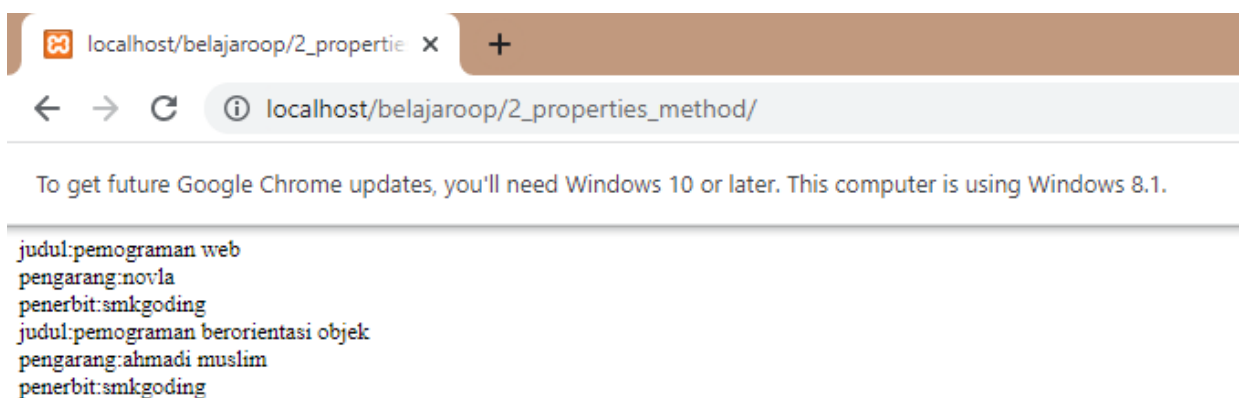


2.properties dan method

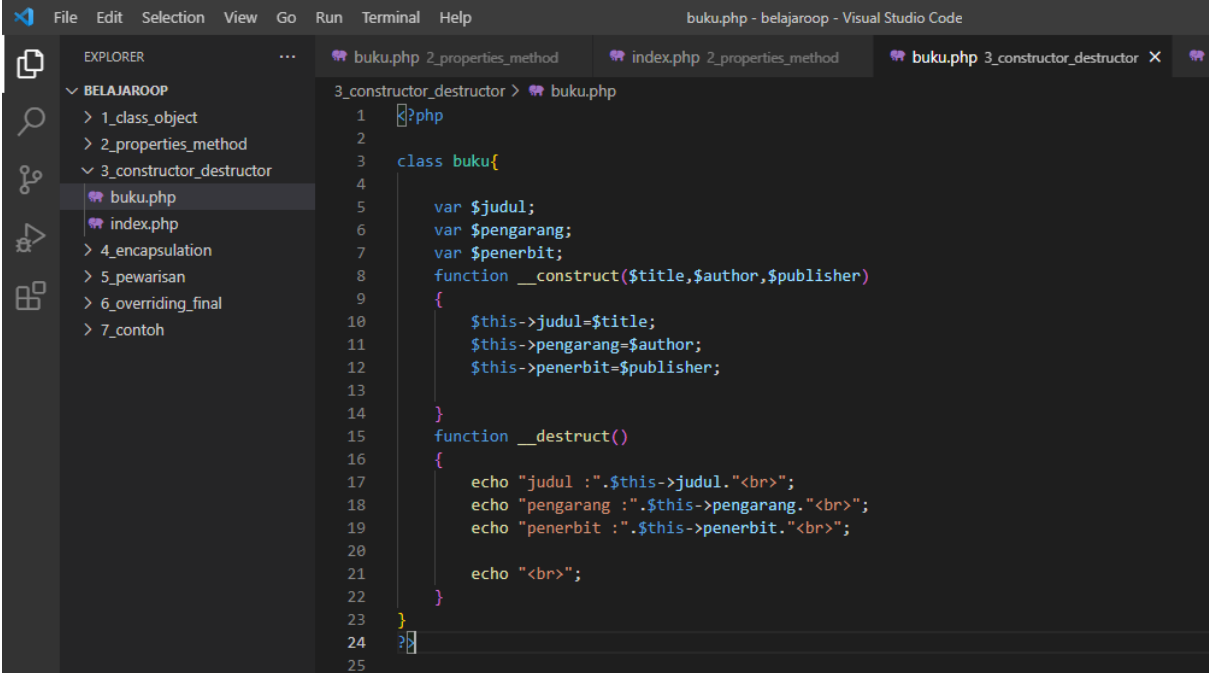
```
1 <?php
2
3 class buku{
4     //properties
5     var $judul;
6     var $pengarang;
7     var $penerbit;
8
9     //method
10    function cetakinfo(){
11        echo "judul:". $this->judul."<br>";
12        echo "pengarang:". $this->pengarang."<br>";
13        echo "penerbit:". $this->penerbit."<br>";
14    }
15
16    function isidata($title,$author,$publisher){
17        $this->judul=$title;
18        $this->pengarang=$author;
19        $this->penerbit=$publisher;
20    }
21 }
22
23
```

```
1 <?php
2
3 include "buku.php";
4
5 $objek=new buku();
6 $objek->isidata("pemograman web","novla","smkgoding");
7 $objek->cetakinfo();
8
9 $objek1=new buku();
10 $objek1->isidata("pemograman berorientasi objek","ahmadi muslim","smkgoding");
11 $objek1->cetakinfo();
12
```

Output:



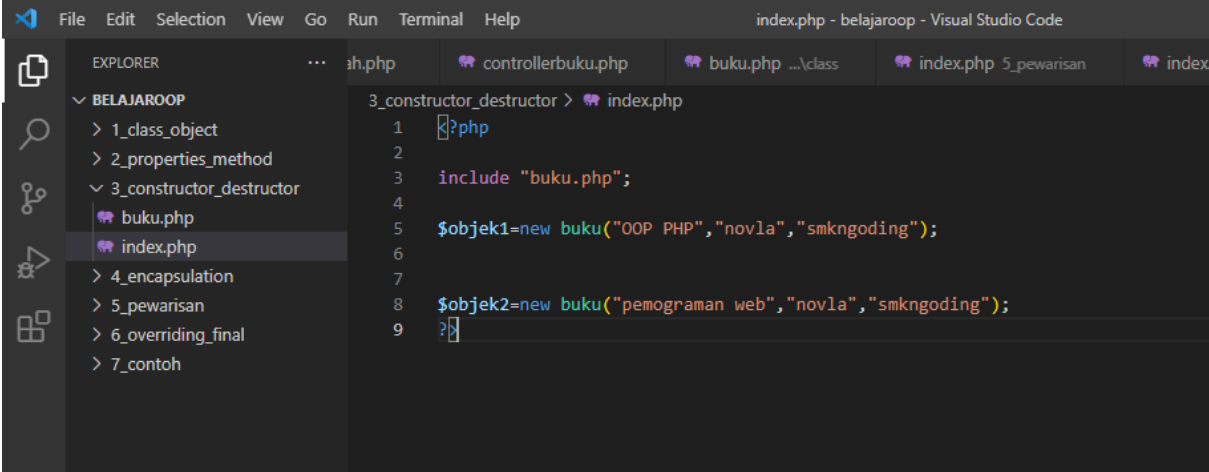
3. Constructor dan destructor



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

EXPLORER
  BELAJAROOP
    > 1_class_object
    > 2_properties_method
    > 3_constructor_destructor
      buku.php
      index.php
    > 4_encapsulation
    > 5_pewarisan
    > 6_overriding_final
    > 7_contoh

3_constructor_destructor > buku.php
1  <?php
2
3  class buku{
4
5      var $judul;
6      var $pengarang;
7      var $penerbit;
8      function __construct($title,$author,$publisher)
9      {
10         $this->judul=$title;
11         $this->pengarang=$author;
12         $this->penerbit=$publisher;
13     }
14
15     function __destruct()
16     {
17         echo "judul :".$this->judul."<br>";
18         echo "pengarang :".$this->pengarang."<br>";
19         echo "penerbit :".$this->penerbit."<br>";
20
21         echo "<br>";
22     }
23 }
24
25
```

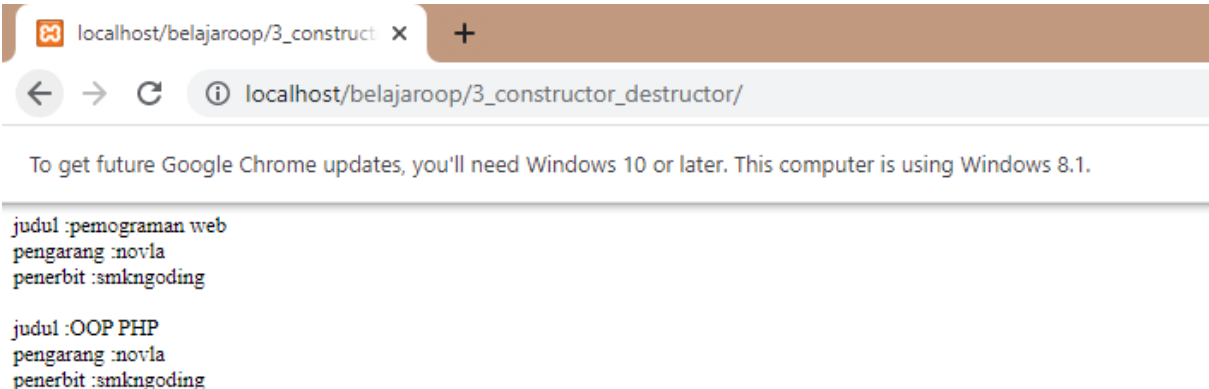


```
File Edit Selection View Go Run Terminal Help index.php - belajaroop - Visual Studio Code

EXPLORER
  BELAJAROOP
    > 1_class_object
    > 2_properties_method
    > 3_constructor_destructor
      buku.php
      index.php
    > 4_encapsulation
    > 5_pewarisan
    > 6_overriding_final
    > 7_contoh

3_constructor_destructor > index.php
1  <?php
2
3  include "buku.php";
4
5  $objek1=new buku("OOP PHP","novla","smkngoding");
6
7
8  $objek2=new buku("pemograman web","novla","smkngoding");
9  <?php
```

Output:



```
localhost/belajaroop/3_constructor_destructor/

To get future Google Chrome updates, you'll need Windows 10 or later. This computer is using Windows 8.1.

judul :pemograman web
pengarang :novla
penerbit :smkngoding

judul :OOP PHP
pengarang :novla
penerbit :smkngoding
```

4. encapsulation

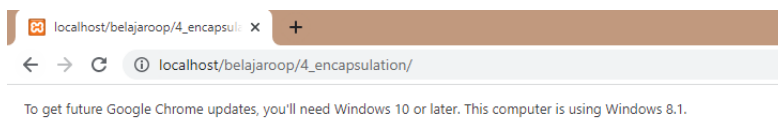
The screenshot shows the Visual Studio Code interface with the Explorer sidebar on the left. The 'BELAJARoop' folder is expanded, showing a directory structure with files like '1_class_object', '2_properties_method', '3_constructor_destructor', '4_encapsulation', '5_pewarisan', '6_overriding_final', and '7_contoh'. The '4_encapsulation' folder is selected, and 'buku.php' is the active file. The code in 'buku.php' defines a class 'buku' with three private properties: '\$judul', '\$pengarang', and '\$penerbit'. It also includes three public methods: 'setjudul(\$title)', 'setpengarang(\$author)', and 'setpenerbit(\$publisher)', each using the '\$this->' syntax to assign values to the private properties. The file explorer on the left shows the following structure:

- BELAJARoop
 - > 1_class_object
 - > 2_properties_method
 - > 3_constructor_destructor
 - > 4_encapsulation
 - buku.php
 - index.php
 - > 5_pewarisan
 - > 6_overriding_final
 - > 7_contoh

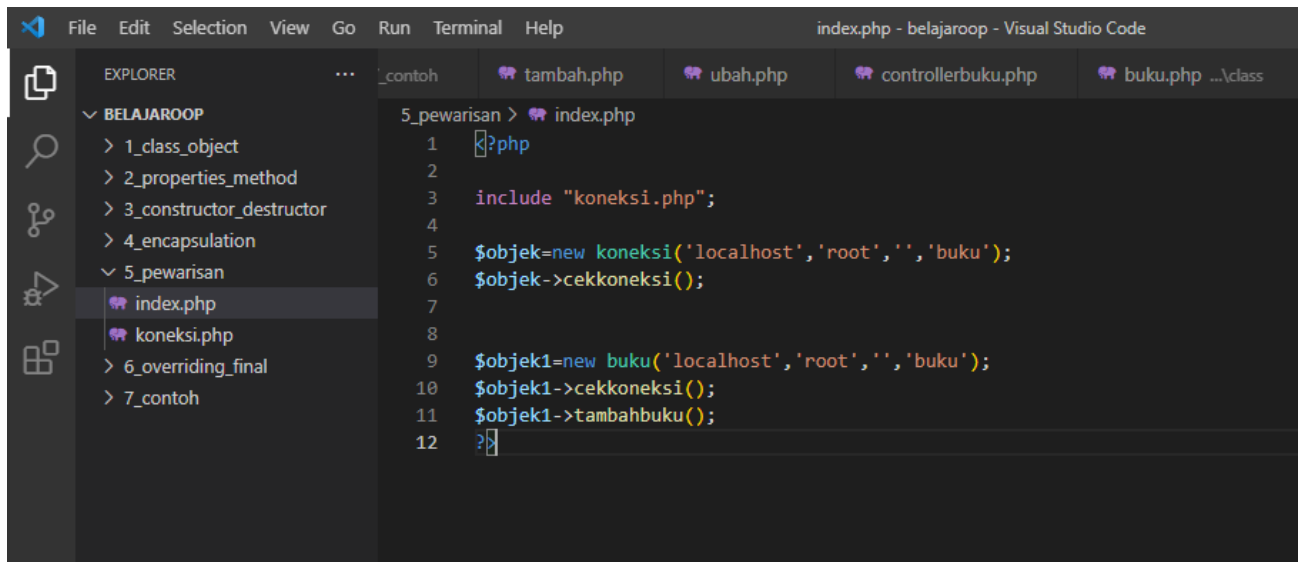
The screenshot shows the Visual Studio Code interface with the Explorer sidebar on the left. The 'BELAJARoop' folder is expanded, showing the same directory structure as the previous screenshot. The '4_encapsulation' folder is selected, and 'index.php' is the active file. The code in 'index.php' includes the 'buku.php' file and creates a new instance of the 'buku' class. It then uses the 'setjudul', 'setpengarang', and 'setpenerbit' methods to set the properties of the '\$objek' instance. The file explorer on the left shows the following structure:

- BELAJARoop
 - > 1_class_object
 - > 2_properties_method
 - > 3_constructor_destructor
 - > 4_encapsulation
 - buku.php
 - index.php
 - > 5_pewarisan
 - > 6_overriding_final
 - > 7_contoh

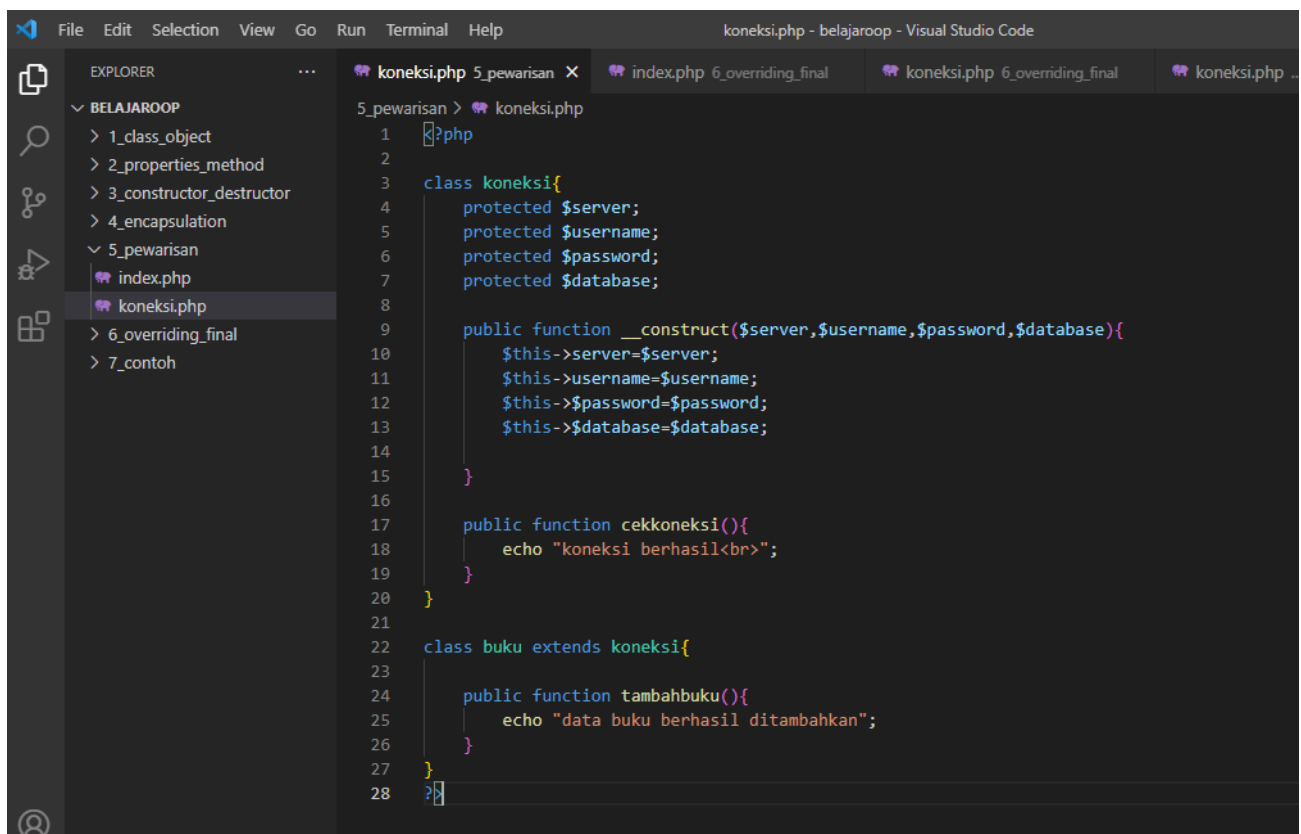
Output:



5.pewaris

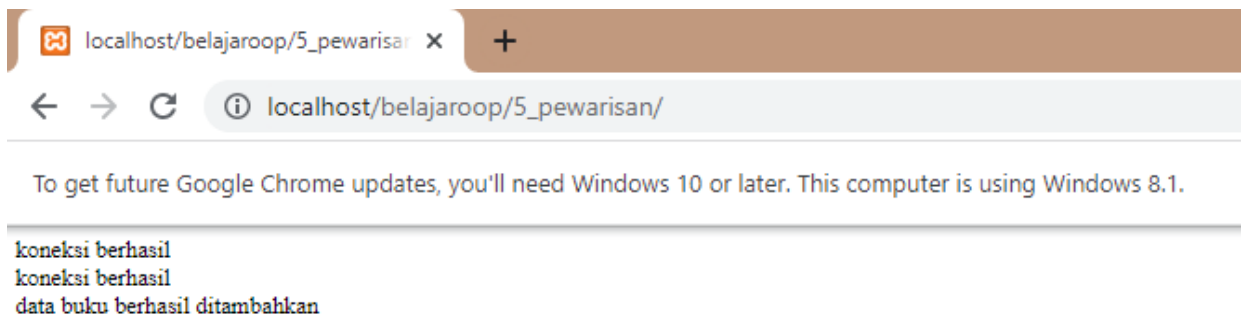
A screenshot of the Visual Studio Code editor. The Explorer sidebar on the left shows a project named 'BELAJARoop' with a folder '5_pewarisan' containing 'index.php' and 'koneksi.php'. The main editor window displays the code for 'index.php' in the '5_pewarisan' directory. The code includes a PHP opening tag, an include statement for 'koneksi.php', and two object instances: '\$objek' of class 'koneksi' and '\$objek1' of class 'buku'. Both objects have their 'cekkoneksi()' method called. The code ends with a closing PHP tag.

```
1 <?php
2
3 include "koneksi.php";
4
5 $objek=new koneksi('localhost','root','','buku');
6 $objek->cekkoneksi();
7
8
9 $objek1=new buku('localhost','root','','buku');
10 $objek1->cekkoneksi();
11 $objek1->tambahbuku();
12 <?>
```

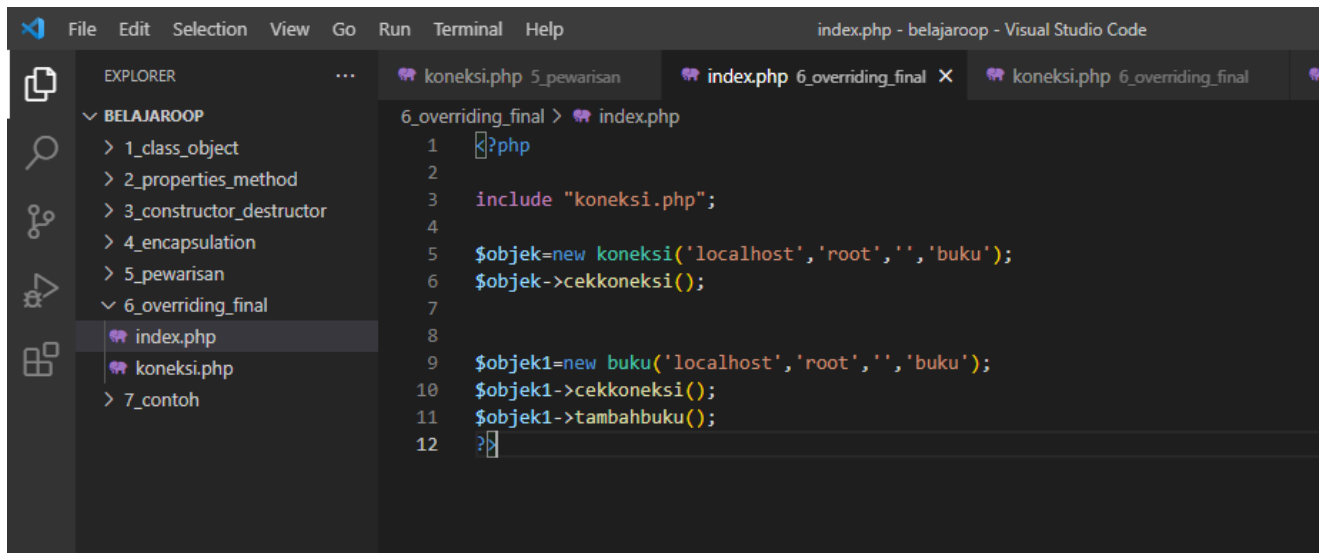
A screenshot of the Visual Studio Code editor showing the 'koneksi.php' file. The Explorer sidebar shows the same project structure, but now 'koneksi.php' is selected. The main editor window displays the code for 'koneksi.php'. It defines a 'koneksi' class with protected properties for server, username, password, and database. It includes a '__construct' method to initialize these properties and a 'cekkoneksi' method that echoes a success message. A 'buku' class is also defined, extending 'koneksi', with a 'tambahbuku' method that echoes a message about adding a book. The code ends with a closing PHP tag.

```
1 <?php
2
3 class koneksi{
4     protected $server;
5     protected $username;
6     protected $password;
7     protected $database;
8
9     public function __construct($server,$username,$password,$database){
10         $this->server=$server;
11         $this->username=$username;
12         $this->$password=$password;
13         $this->$database=$database;
14     }
15
16
17     public function cekkoneksi(){
18         echo "koneksi berhasil<br>";
19     }
20 }
21
22 class buku extends koneksi{
23
24     public function tambahbuku(){
25         echo "data buku berhasil ditambahkan";
26     }
27 }
28 <?>
```

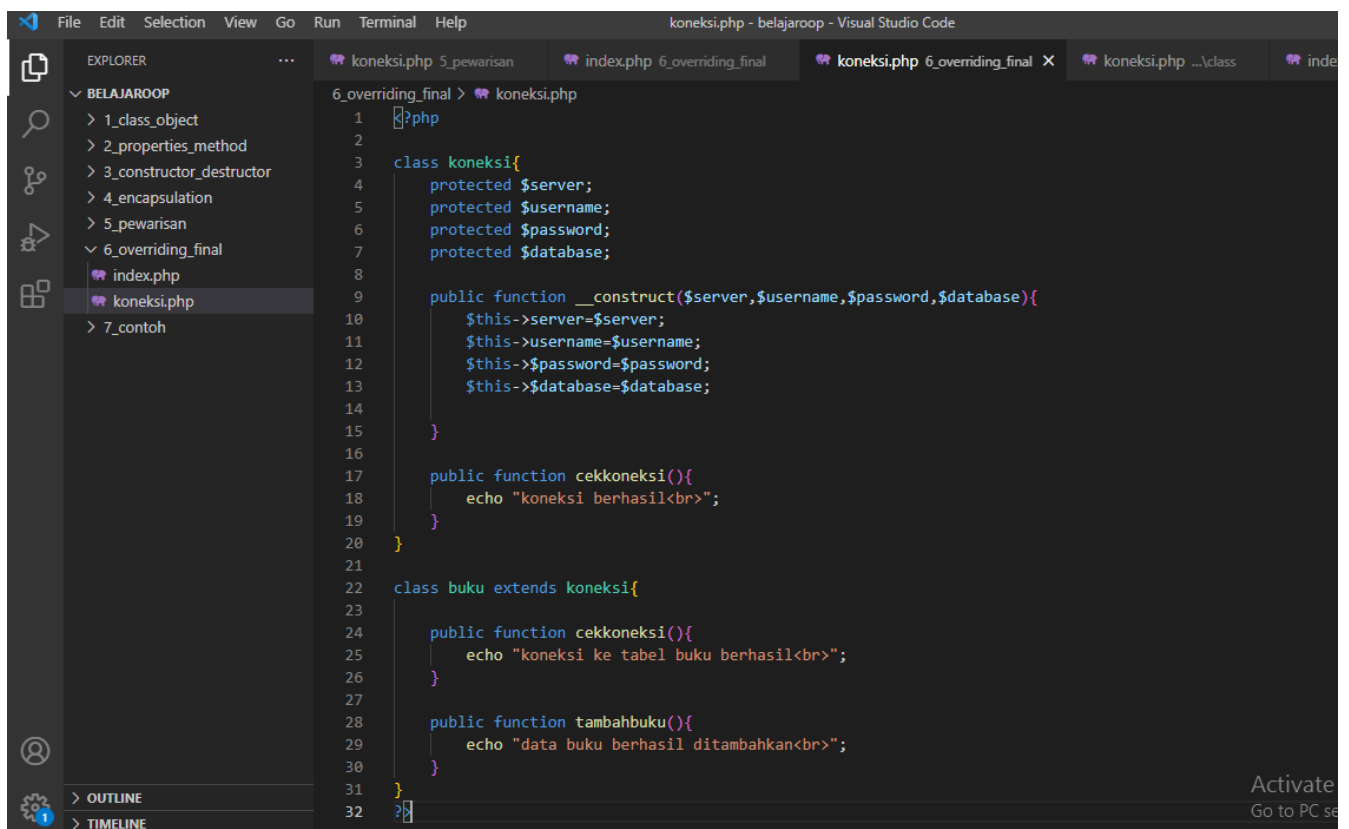
Output:



6.Overriding Final

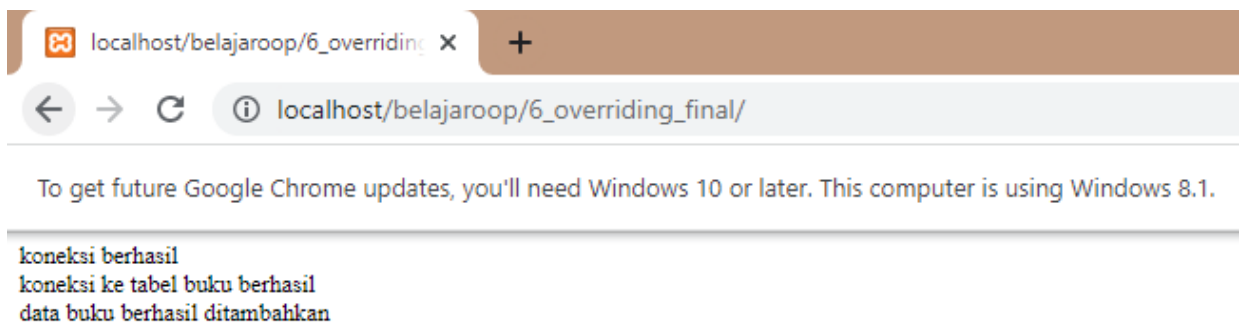
A screenshot of the Visual Studio Code editor. The Explorer sidebar on the left shows a project named 'BELAJAROOOP' with a folder '6_overriding_final' containing 'index.php' and 'koneksi.php'. The main editor window shows the 'index.php' file with the following PHP code:

```
1 <?php
2
3 include "koneksi.php";
4
5 $objek=new koneksi('localhost','root','','buku');
6 $objek->cekkoneksi();
7
8
9 $objek1=new buku('localhost','root','','buku');
10 $objek1->cekkoneksi();
11 $objek1->tambahbuku();
12
```

A screenshot of the Visual Studio Code editor showing the 'koneksi.php' file. The Explorer sidebar on the left shows the same project structure, but 'koneksi.php' is now selected. The main editor window shows the following PHP code:

```
1 <?php
2
3 class koneksi{
4     protected $server;
5     protected $username;
6     protected $password;
7     protected $database;
8
9     public function __construct($server,$username,$password,$database){
10         $this->server=$server;
11         $this->username=$username;
12         $this->$password=$password;
13         $this->$database=$database;
14     }
15
16
17     public function cekkoneksi(){
18         echo "koneksi berhasil<br>";
19     }
20 }
21
22 class buku extends koneksi{
23
24     public function cekkoneksi(){
25         echo "koneksi ke tabel buku berhasil<br>";
26     }
27
28     public function tambahbuku(){
29         echo "data buku berhasil ditambahkan<br>";
30     }
31 }
32
```

Output:



7.implementasi /contoh

Folder class:

- **Buku php**

```
1 <?php
2
3 include "koneksi.php";
4
5 class buku extends koneksi
6 {
7
8     public function tampilsemua()
9     {
10         $query = "SELECT * FROM buku";
11         $sql = mysqli_query($this->koneksi, $query);
12
13         while ($data = mysqli_fetch_array($sql)) {
14             $datas[] = $data;
15         }
16         if (isset($datas)) {
17             return $datas;
18         } else {
19             return 0;
20         }
21     }
22
23     public function tambahdata($judul, $pengarang, $penerbit)
24     {
25         $query = "INSERT INTO buku SET judul='{$judul}', pengarang='{$pengarang}', penerbit='{$penerbit}'";
26         mysqli_query($this->koneksi, $query);
27     }
28
29 }
```

```
public function ubahdata($id, $judul, $pengarang, $penerbit)
{
    $query = "UPDATE buku SET judul='{$judul}', pengarang='{$pengarang}', penerbit='{$penerbit}' WHERE id={$id}";
    mysqli_query($this->koneksi, $query);
}

public function hapusdata($id)
{
    $query = "DELETE FROM buku WHERE id='{$id}'";
    mysqli_query($this->koneksi, $query);
}

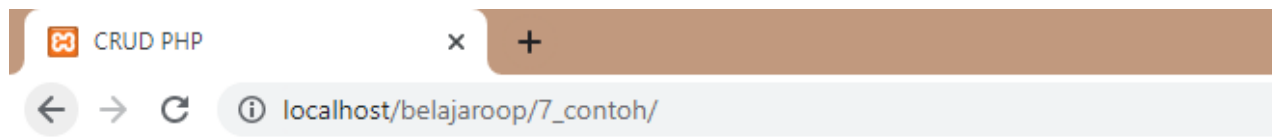
public function caridatabyid($id)
{
    $query = "SELECT * FROM buku WHERE id='{$id}'";
    $sql = mysqli_query($this->koneksi, $query);
    $data = mysqli_fetch_assoc($sql);
    return $data;
}
```

Activate Windows
Go to PC settings to activate Windows

- **Koneksi.php**

```
1 <?php
2 class koneksi{
3     private $server='localhost';
4     private $user='root';
5     private $pass='';
6     private $database='belajaroopnovla';
7     protected $koneksi;
8
9     public function __construct()
10    {
11        $this->koneksi=mysqli_connect($this->server,$this->user,$this->pass,$this->database);
12    }
13    public function cekkoneksi(){
14        if(mysqli_connect_errno()){
15            echo "koneksi gagal";
16        }else{
17            echo "koneksi berhasil";
18        }
19    }
20
21 }
```

Output:



[tambah data](#)

no	judul	pengarang	penerbit	aksi
1	malin kundang	novla	daramaulida	ubah hapus
2	DILAN	novla	jihan	ubah hapus
3	Bang muslim	novla	jihan	ubah hapus
4	coba	ahmadi	muslim	ubah hapus

Folder view:

- Tambah php

```

1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <meta charset="UTF-8">
5     <meta name="viewport" content="width=device-width, initial-scale=1.0">
6     <title>tambah data buku</title>
7 </head>
8 <body>
9     <form action="../controllerbuku.php?aksi=tambah" method="post">
10         <label for="judul">judul</label>
11         <input type="text" name="judul" id="judul">
12         <label for="pengarang">pengarang</label>
13         <input type="text" name="pengarang" id="pengarang">
14         <label for="penerbit">penerbit</label>
15         <input type="text" name="penerbit" id="penerbit">
16         <input type="submit" value="simpan">
17     </form>
18 </body>
19
20 </html>

```

- **Ubah php**

```

1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <meta charset="UTF-8">
5     <meta name="viewport" content="width=device-width, initial-scale=1.0">
6     <title>tambah data buku</title>
7 </head>
8 <body>
9     <?php
10         include "../class/buku.php";
11         $objek=new buku();
12         $data=$objek->caridatabyid($_GET['id'])
13     ?>
14     <form action="../controllerbuku.php?aksi=ubah" method="post">
15         <input type="hidden" name="id" value="<?=$data['id']?>">
16         <label for="judul">judul</label>
17         <input type="text" name="judul" id="judul" value="<?=$data['judul']?>">
18         <label for="pengarang">pengarang</label>
19         <input type="text" name="pengarang" id="pengarang" value="<?=$data['pengarang']?>">
20         <label for="penerbit">penerbit</label>
21         <input type="text" name="penerbit" id="penerbit" value="<?=$data['penerbit']?>">
22         <input type="submit" value="simpan">
23     </form>
24 </body>
25
26 </html>

```

Output:

tambah data buku

localhost/belajaroop/7_contoh/view/ubah.php?id=1

To get future Google Chrome updates, you'll need Windows 10 or later. This computer is using Windows 8.1.

judul malin kundang pengarang nova penerbit daramaulida Simpan

Folder controllerbuku.php

```
1 <?php
2
3 include "class/buku.php";
4 $buku=new buku();
5 $aksi=$_GET['aksi'];
6
7 if($aksi=='tambah'){
8     $buku->tambahdata($_POST['judul'],$_POST['pengarang'],$_POST['penerbit']);
9 }
10 }elseif($aksi=='hapus'){
11     $buku->hapusdata($_GET['id']);
12 }
13 }elseif($aksi=='ubah'){
14     $buku->ubahdata($_POST['id'],$_POST['judul'],$_POST['pengarang'],$_POST['penerbit']);
15 }
16 }
17 header("location:index.php");
```

Folder index.php

```
1 <?php
2
3 include "class/buku.php";
4
5 ?>
6
7 <!DOCTYPE html>
8 <html lang="en">
9 <head>
10     <meta charset="UTF-8">
11     <meta http-equiv="X-UA-Compatible" content="IE=edge">
12     <meta name="viewport" content="width=device-width, initial-scale=1.0">
13     <title>CRUD PHP</title>
14 </head>
15 <body>
16     <a href="view/tambah.php">tambah data</a>
17     <table border="1">
18         <thead>
19             <tr>
20                 <th>no</th>
21                 <th>judul</th>
22                 <th>pengarang</th>
23                 <th>penerbit</th>
24                 <th>aksi</th>
25             </tr>
```

```

        </tr>
    </thead>
    <tbody>
        <?php
        $no=1;
        $objek=new buku();
        if ($objek->tampilsemua()!=0){
            foreach($objek->tampilsemua() as $data){

                echo"<tr>
                <td>$no</td>
                <td>$data[judul]</td>
                <td>$data[pengarang]</td>
                <td>$data[penerbit]</td>
                <td>
                <a href='view/ubah.php?id=$data[id]''>ubah</a>
                <a href='controllerbuku.php?aksi=hapus&id=$data[id]''>hapus</a>
                </td>
                </tr>";
                $no++;
            }
        }

        ?>
    </tbody>
</table>
</body>
</html>

```