

Web Technologies (IS22226)

Practical -01



Static and Dynamic Web Pages

Static Web Pages Vs Dynamic Web Pages

Static Web page

- ▶ A Web page with contents that remain fixed and unchanged once it has been created by the author.

2. Web server looks for the corresponding HTML files



3. HTML files return to client



1. Client requests web pages



4. Client browser formats HTML files

Static Web Pages Vs Dynamic Web Pages

Static Web Page

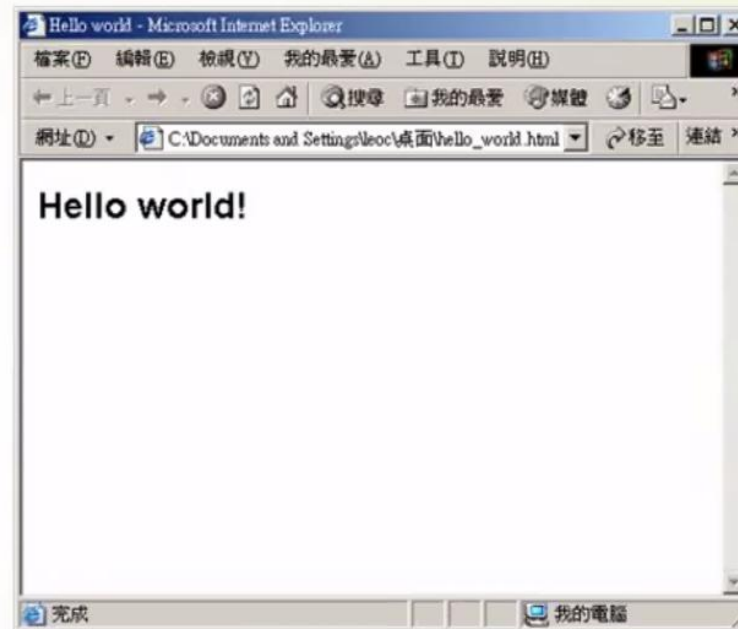


```
hello_world - 記事本
檔案(F) 編輯(E) 格式(O) 說明(H)

<html>
<head>
<title>Hello world</title>
</head>

<body>
<h2><font face="Arial">Hello world!</font></h2>

</body>
</html>
```



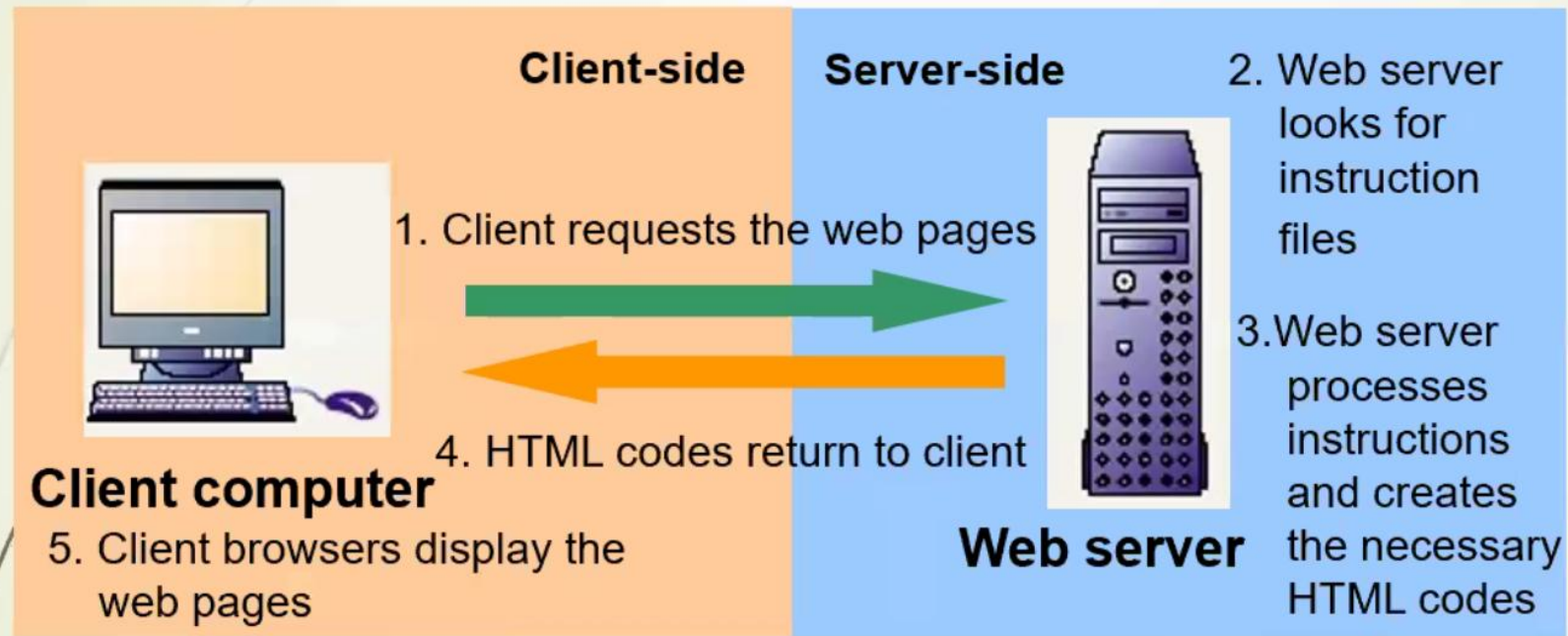
• A static document is simply any web page that is saved to disk and passed back to a requesting browser without changes.

Static Web Pages Vs Dynamic Web Pages

Dynamic Web page

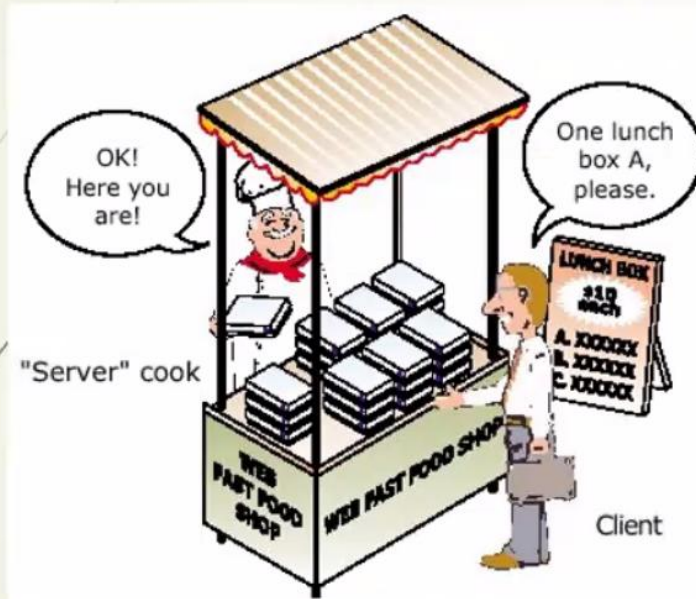
- ▶ A Web page with contents generated “on-the-fly” by the server or the client computer according to clients' requests.
 - ✓ e.g. return the system's current date and time to the surfer browser (written in Active Server Page).
- ▶ A dynamic Web page is any Web page which has content that is changed by a program or script at the time the page is requested.

Dynamic Web Pages



Server-side dynamic Web pages

Static Web Pages Vs Dynamic Web Pages



Buying ready-made lunch boxes:
browsing static Web pages



Ordering noodles in a noodle stall:
browsing dynamic Web pages

Introduction To PHP

- PHP is a scripting language commonly used on web servers.
- PHP Stands for "Hypertext Preprocessor"
- Open source
- Syntax is inspired by C
 - ✓ **Curly braces, semicolons, no significant whitespace**
- Syntax inspired by Perl
 - ✓ **Dollar signs to start variable names**
- A Server Side Technology





Ingredients

Web Server

Database

PHP Parser

Tool Packages for developing PHP pages

- **WAMP**



www.wampserver.com

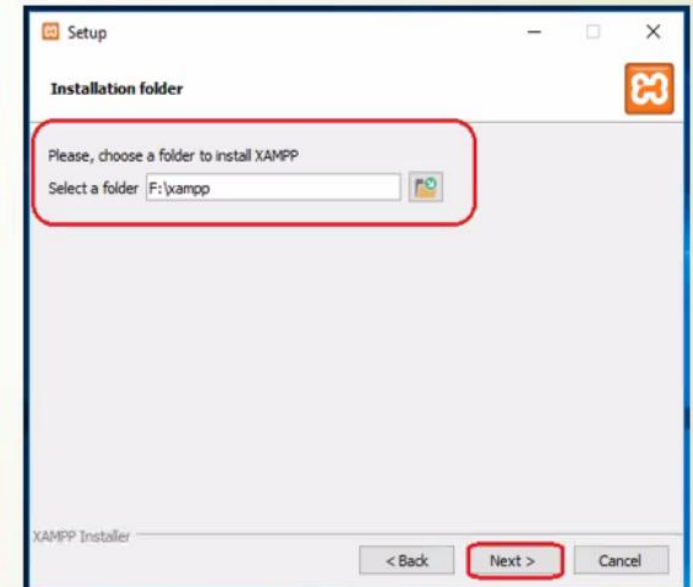
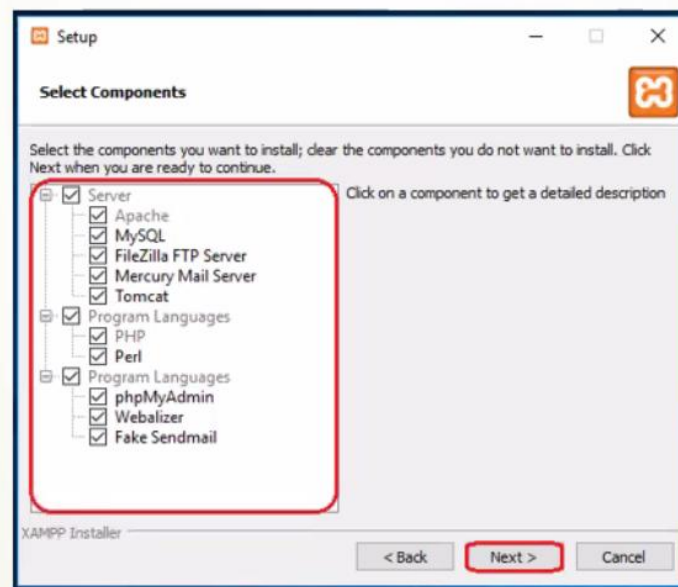
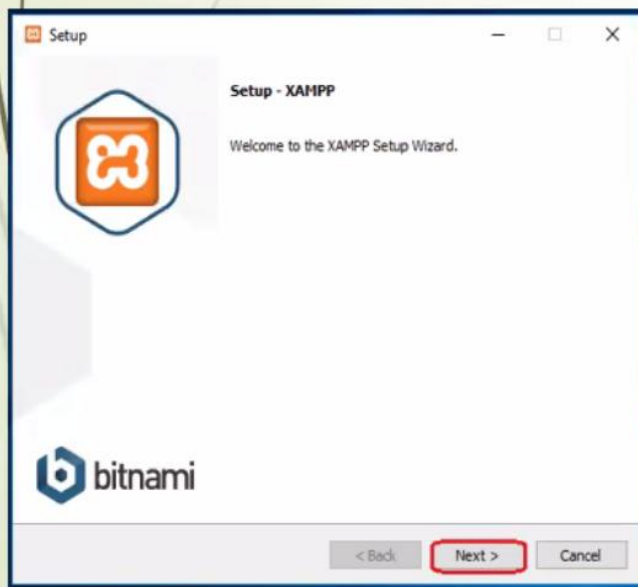
- **XAMPP**

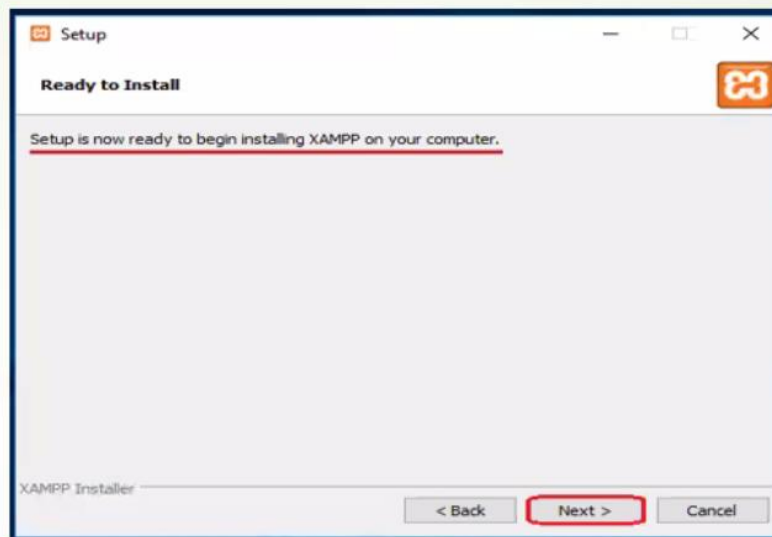


XAMPP

How to Install Xampp

- To download the XAMPP server, visit the "<https://www.apachefriends.org/index.html>" website.





3 ways in PHP coding

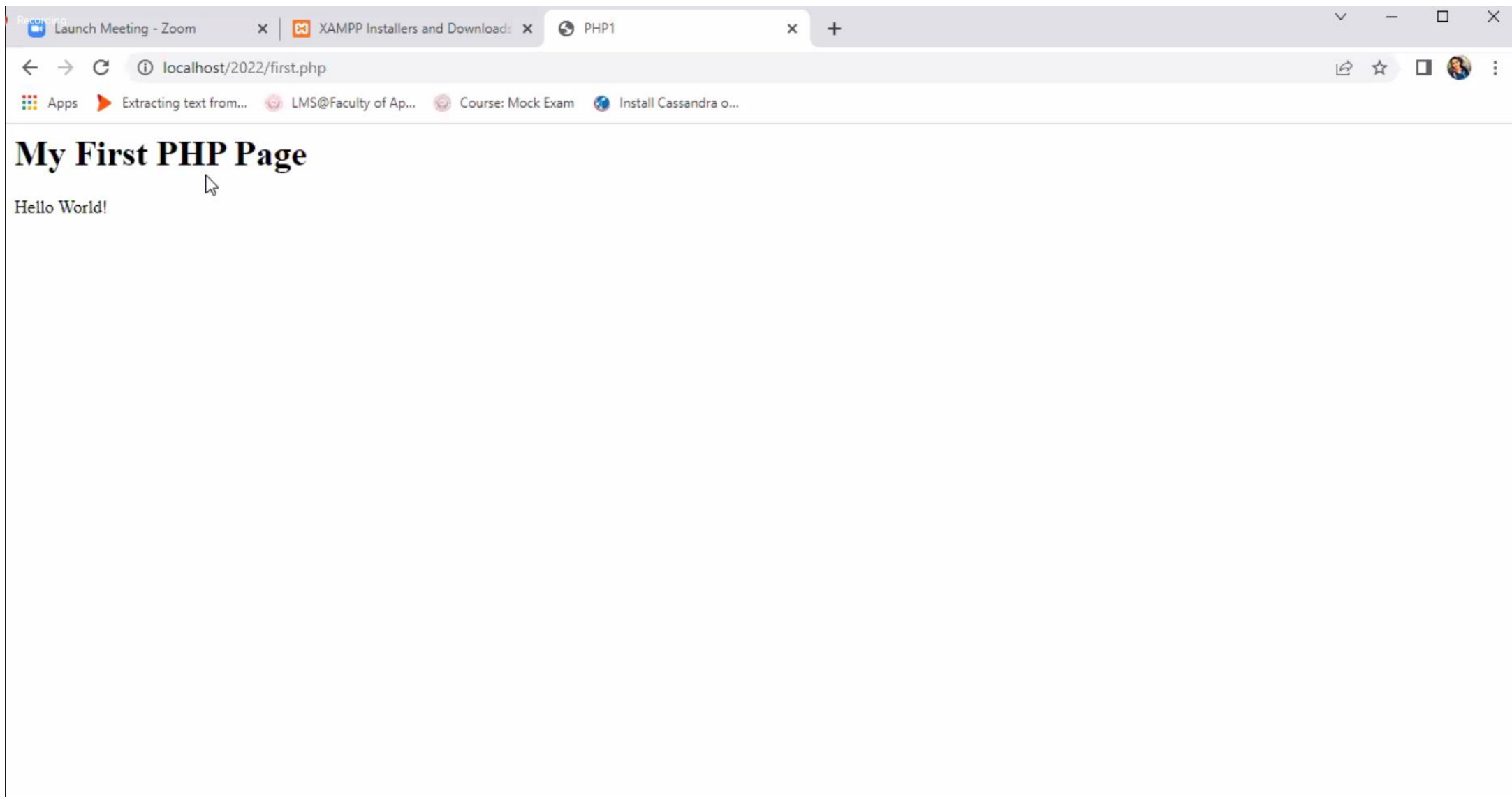
```
<?php PHP code goes here ; ?>
```

```
<? PHP code goes here ; ?>
```

```
<script language="php">PHP code goes here ; </script>
```

Example

```
<html>
  <head>
    <title>PHP 1</title>
  </head>
  <body>
    <h1>My first PHP page</h1>
    <?php
      echo "Hello World!";
    ?>
  </body>
</html>
```

“print” instead of “echo”

```
<html>
  <head>
    <title>PHP 1</title>
  </head>
  <body>
    <h1>My first PHP page</h1>
    <?php
      echo "Hello World!";
    ?>
  </body>
</html>
```

print



Commenting in PHP code

- Use `//` to make a single-line comment
- Use `#` to make a single-line comment
- Use `/*` and `*/` to make a large comment block

Example

```
<?php
```

```
// This is a single-line comment
```

```
# This is also a single-line comment
```

```
/* This is a multiple-lines comment block that spans over multiple  
Lines */
```

```
// You can also use comments to leave out parts of a code line
```

```
echo "hi";
```

```
?>
```

C:\xampp\htdocs\MyProject\2022\ex-2.php - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?



new-1.php ex-12.php ex-2.php ex-3.php ex-4.php ex-5.php ex-6.php ex-7.php ex-8.php ex-9.php ex-10.php ex-11.php first.php

```
1 <html>
2   <head>
3     <title>PHP</title>
4   </head>
5
6   <body>
7
8
9   <?php
10
11     // This is a single-line comment
12     # This is also a single-line comment
13     /* This is a multiple-lines comment block that spans over multiple
14        Lines */
15     // You can also use comments to leave out parts of a code line
16
17     echo "hi";
18   ?>
19
20
21
22   </body>
23 </html>
```

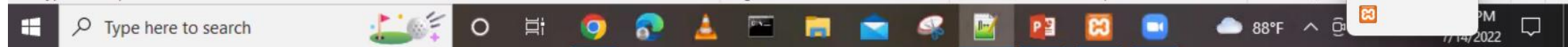
PHP Hypertext Preprocessor file

length: 351 lines: 23

Ln: 17 Col: 19 Sel: 0 | 0

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Case Sensitivity

- All keywords (e.g. if, else, while, echo, etc.), classes, functions, and user-defined functions are **NOT case-sensitive**.

✓ Ex:

```
<?php
```

```
ECHO "Hello World! ";
```

```
echo "Hello World! ";
```

```
EcHo "Hello World! ";
```

```
?>
```

Note: all variable names are case-sensitive.

Variables

- A storage area
- When a variable is declared, it can be used over and over again in the script
- **No need** to tell PHP which data type the variable is
- Case sensitive

```
<?php
```

```
$txt = "Hello world!";
```

```
$x = 5;
```

```
$y = 10.5;
```

```
?>
```

Example :

```
<?php
```

```
$txt = "the Introduction of PHP";
```

```
echo "Welcome to " . $txt . " !";
```

```
?>
```

Dot (.) used to concatenate

Variables – naming conventions

- Start with a dollar sign (\$)
- Followed by a letter or underscore, **Not a Number**
- can only contain alpha-numeric characters, underscores (a-z, A-Z, 0-9, and _)
- **should not** contain spaces.
- For more than one word,
 - ✓ separated with an underscore (\$my_Variable)
 - ✓ capitalization (\$myVariable)

Variables

- PHP has eight data types;

Integer	Float	Boolean	NULL
String	Array	Object	Resource

When necessary, PHP automatically converts data types from one to another

Activate Windows
Go to Settings to activate Windows.

Variables - Integer

- A whole number (without decimals)
- An integer must have at least one digit (0-9)
- An integer cannot contain comma or blanks
- An integer must not have a decimal point
- An integer can be either positive or negative

```
<?php  
$x = 5985;  
var_dump($x);  
?>
```

**var_dump() function returns
the data type and value**

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Variables - Integer

```
<?PHP
```

```
$decimal_var = 31;
```

```
echo $decimal_var;
```

```
?>
```

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Variables - Integer

- Maximum Value

```
<?PHP
```

```
$var = PHP_INT_MAX;
```

```
echo var_dump($var);
```

```
?>
```

*C:\xampp\htdocs\MyProject\2022\ex-5.php - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

new-1.php ex-12.php ex-2.php ex-3.php ex-4.php ex-5.php ex-6.php ex-7.php ex-8.php ex-9.php ex-10.php ex-11.php first.php

1<html>

2<head>

3<title>PHP</title>

4</head>

5

6<body>

7

8<?php

9

10 \$x = 5985;

11 var_dump(\$x);

12

13 echo "
";

14

15 \$decimal_var = 31;

16 echo \$decimal_var;

17

18 echo "
";

19

20 \$var = PHP_INT_MAX;

21 echo var_dump(\$var);

22

23 echo "
";

24

25

26

27 ?>

28

29 </body>

30 </html>

Activate Windows
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PHP Hypertext Preprocessor filelength : 332 lines : 30Ln : 13 Col : 17 Sel : 12 | 1Windows (CR LF)UTF-8INS

Variables - Float

- ▀ A number with a decimal point or a number in exponential form

```
<?php
```

```
$x = 10.365;
```

```
$y = 2.34;
```

```
var_dump($x);
```

```
?>
```


Launch Meeting - Zoom x XAMPP Installers and Downloads x PHP x +

localhost/2022/ex-5.php

Apps Extracting text from... LMS@Faculty of Ap... Course: Mock Exam Install Cassandra o...

float(10.365)



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Variables - String

- Sequence of characters inside quotes.
- Can use single or double quotes

```
<?php
```

```
$x = "Hello world! ";
```

```
$y = 'Hello world!';
```

```
echo $x;
```

```
echo "<br>";
```

```
echo $y;
```

```
?>
```

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File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

new-1.php ex-12.php ex-2.php ex-3.php ex-4.php ex-5.php ex-6.php ex-7.php ex-8.php ex-9.php ex-10.php ex-11.php first.php

```
1 <html>
2   <head>
3     <title>PHP</title>
4   </head>
5
6   <body>
7
8
9     <?php
10
11       $x = "hello world!";
12       $y = 'hello world!';
13
14       echo $x;
15       echo "<br>";
16       echo $y;
17
18     ?>
19
20
21   </body>
22 </html>
```

PHP Hypertext Preprocessor file

length : 222 lines : 22

Ln : 15 Col : 29 Sel : 0 | 0

Windows (CR LF) UTF-8 INS

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Variables - String

Operations on strings

```
<?php
```

```
$x = "Helloworld! ";
```

```
echo strlen($x );
```

```
echo "<br>";
```

```
echo strtoupper($x );
```

```
echo "<br>";
```

```
echo strtolower($x );
```

```
echo "<br>";
```

```
echo str_shuffle($x );
```

```
echo str_shuffle($x );
```

```
?>
```

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File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?



new-1.php ex-12.php ex-2.php ex-3.php ex-4.php ex-5.php ex-6.php ex-7.php ex-8.php ex-9.php ex-10.php ex-11.php first.php

```
1 <html>
2   <head>
3     <title>PHP</title>
4   </head>
5
6   <body>
7
8     <?php
9
10      $y="hello world!";
11
12      echo strlen($y);
13      echo"<br>";
14
15      echo strtoupper($y);
16      echo"<br>";
17
18      echo strtolower($y);
19      echo"<br>";
20
21      echo str_shuffle($y);
22      echo"<br>";
23      echo str_shuffle($y);
24      echo"<br>";
25
26    ?>
27
28
29
30   </body>
31 </html>
```

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PHP Hypertext Preprocessor file

length : 369 lines : 31

Ln : 11 Col : 17 Sel : 0 | 0

Windows (CR LF)

UTF-8

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Variables - Boolean

- Represents two possible states:

TRUE or FALSE

```
<?php
```

```
$x = true;
```

```
$y = false;
```

```
var_dump($x);
```

```
?>
```


Variables - Array

- Stores multiple values in one single variable

```
<?php
```

```
$myArray = array("Sunil",25,"Kandy");
```

```
var_dump($myArray);
```

```
?>
```

Recording
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You are viewing Kinitha Thiruchelvam's screen View Options v

localhost/2022/ex-9.php

Apps Extracting text from... LMS@Faculty of Ap... Course: Mock Exam Install Cassandra o...

```
array(3) { [0]=> string(5) "Sunil" [1]=> int(25) [2]=> string(5) "Kandy" }
```

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Variables - Null

- A special data type which can have only one value: **NULL**.
- If a variable is created without a value, it is automatically assigned a value of NULL

<?php

```
$x = "Hello world!";
```

```
$x = null;
```

```
var_dump($x);
```

?>

Example:

- ▶ Temperature – 12.4
- ▶ Name – kamal
- ▶ Age 41
- ▶ array (1, 2, 3)

Practical 1 - PowerPoint (Product Activation Failed)

FILE HOME INSERT DESIGN TRANSITIONS ANIMATIONS SLIDE SHOW REVIEW VIEW

Paste Cut Copy Format Painter New Slide Layout Reset Section Font Paragraph Drawing Editing

27 Variables - String
28 Variables - Boolean
29 Variables - Array
30 Variables - Null
31 Example
32 Constants

Example:

- Temperature - 12.4
- Name - kamal
- Age 41
- array (1, 2, 3)

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SLIDE 31 OF 33

NOTES COMMENTS 74%

Type here to search

2:19 PM 7/14/2022

leeting

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C:\xampp\htdocs\MyProject\2022\ex-10.php - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?



new-1.php ex-12.php ex-2.php ex-3.php ex-4.php ex-5.php ex-6.php ex-7.php ex-8.php ex-9.php ex-10.php ex-11.php first.php

```
1 <html>
2   <head>
3     <title>PHP</title>
4   </head>
5
6   <body>
7
8     <?php
9
10    $x = "Hello world!";
11    $x = null;
12    var_dump($x);
13
14    ?>
15
16
17
18
19   </body>
20 </html>
21
```

Activate Windows
Go to Settings to activate Windows.

PHP: Untitled - Properties File

Length: 178 Lines: 21

Ln: 10, Col: 37, Sel: 910

Windows (CRLF) UTF-8

INS

Start Video

Participants 58

Chat

Share Screen

Record

Reactions

Apps

Whiteboards

C:\xampp\htdocs\MyProject\2022\ex-11.php - Notepad++

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new-1.php ex-12.php ex-2.php ex-3.php ex-4.php ex-5.php ex-6.php ex-7.php ex-8.php ex-9.php ex-10.php ex-11.php first.php

```
1 <html>
2 <head>
3   <title>PHP</title>
4 </head>
5
6 <body>
7
8   <?php
9
10    $temperature = 12.4;
11    $name = "Kamal";
12    $age = 41;
13    $newArray = array(1,2,3);
14
15    echo $temperature;
16    echo "<br>";
17
18    echo $name;
19    echo "<br>";
20
21    echo $age;
22    echo "<br>";
23
24    echo $newArray[0];
25
26
27   ?>
28
29
30
31 </body>
32 </html>
33
```

Activate Windows
Go to Settings to activate Windows.

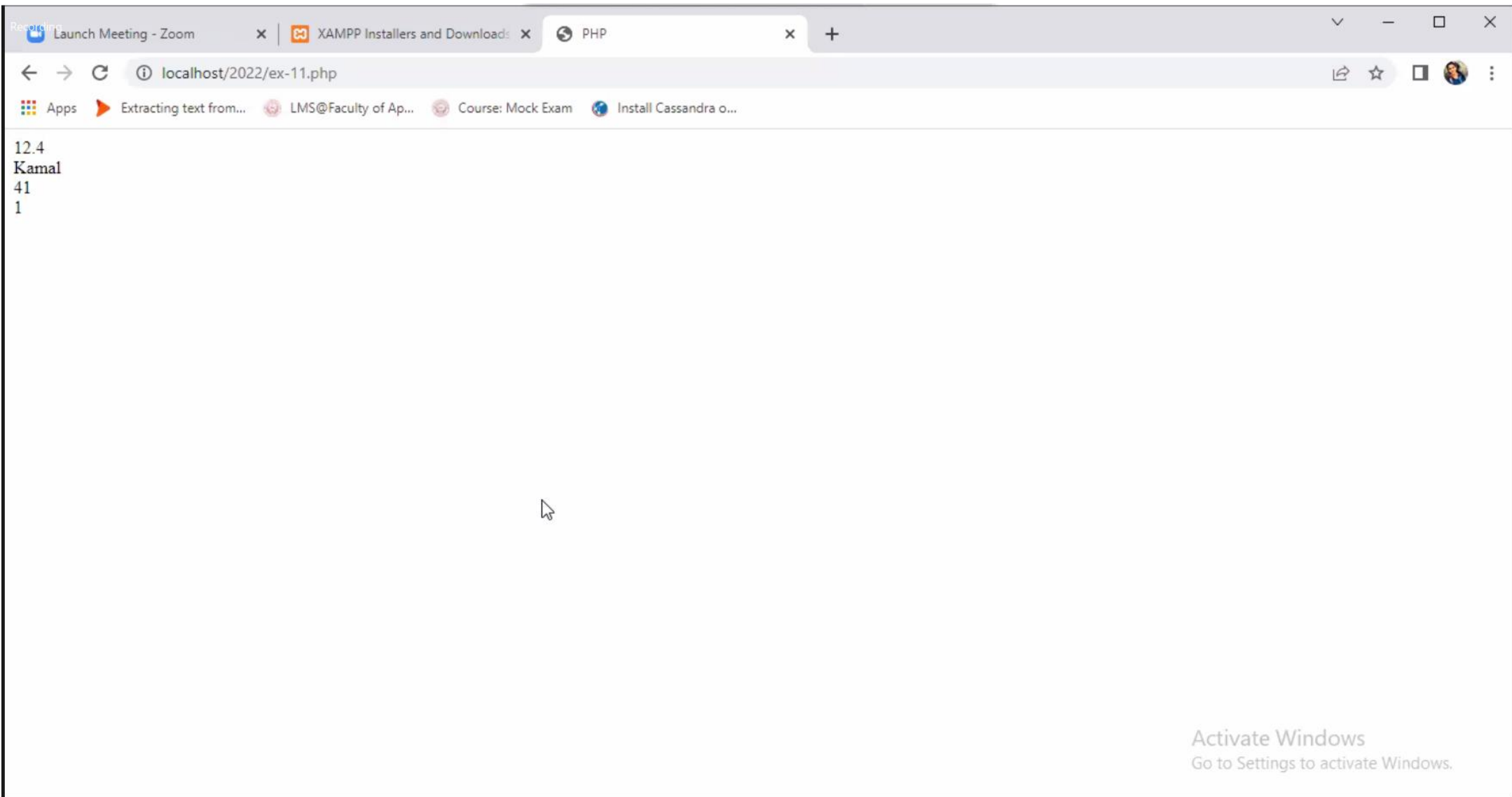
PHP Hypertext Preprocessor file

length : 370 lines : 33

Ln : 10 Col : 36 Sel : 0 | 0

Windows (CR LF) UTF-8

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Constants

- A constant is a name for a value that, unlike a variable, cannot be re-associated with different value.
- We use define() function to create constants in PHP.

```
<?php
```

```
Define ("NAME" , "Ruwan");
```

```
Echo NAME;
```

```
?>
```

Do not need \$ character

C:\xampp\htdocs\MyProject\2022\ex-12.php - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?



new-1.php ex-12.php ex-2.php ex-3.php ex-4.php ex-5.php ex-6.php ex-7.php ex-8.php ex-9.php ex-10.php ex-11.php first.php

```
1 <html>
2
3 <head>
4 </head>
5
6 <body>
7
8
9 <?php
10
11 define("NAME", "Ruwan");
12 echo NAME;
13 echo "<br>";
14 echo "<br>";
15
16 echo TRUE;
17 echo "<br>";
18 echo PHP_VERSION;
19 echo "<br>";
20 echo PHP_OS;
21 echo "<br>";
22 echo __LINE__;
23 echo "<br>";
24 echo __FILE__;
25 echo "<br>";
26 echo PHP_DATADIR;
27
28 ?>
29
30 </body>
31 </html>
```

Activate Windows
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PHP: Latest Development File Length: 303 Lines: 31 Line 6 Col 7 Col 31.0 Windows (CP1252) UTF-8 JMC

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FILE HOME INSERT DESIGN TRANSITIONS ANIMATIONS SLIDE SHOW REVIEW VIEW

Clipboard Slides Font Paragraph Drawing Editing

29 Variables - array

30 Variables - null

31 Example

32 Constants

33 Predefined Constants

Predefined Constants

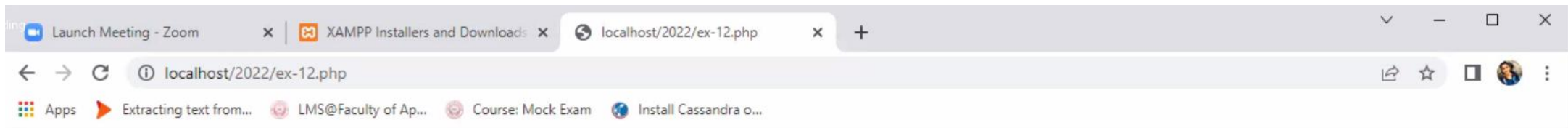
- TRUE
- PHP_VERSION
- PHP_OS
- _LINE_
- _FILE_
- PHP_DATADIR

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SLIDE 33 OF 33

NOTES COMMENTS

74%



Ruwan

1
7.3.1
WINNT
22
C:\xampp\htdocs\MyProject\2022\ex-12.php
C:\php

In php
echo (7>9); -> It doesn't show 0 as a output in PHP.

echo(9>7); -> It shows 1 as a output

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