

Laboratorul 5

Tehnologii Web

**Programare
Web in PHP**



Obiectivele laboratorului



XAMPP



Limbaj



Web PHP



OOP in PHP

Instalare XAMPP



Control Panel

XAMPP Control Panel v3.2.2 [Compiled: Nov 12th 2015]

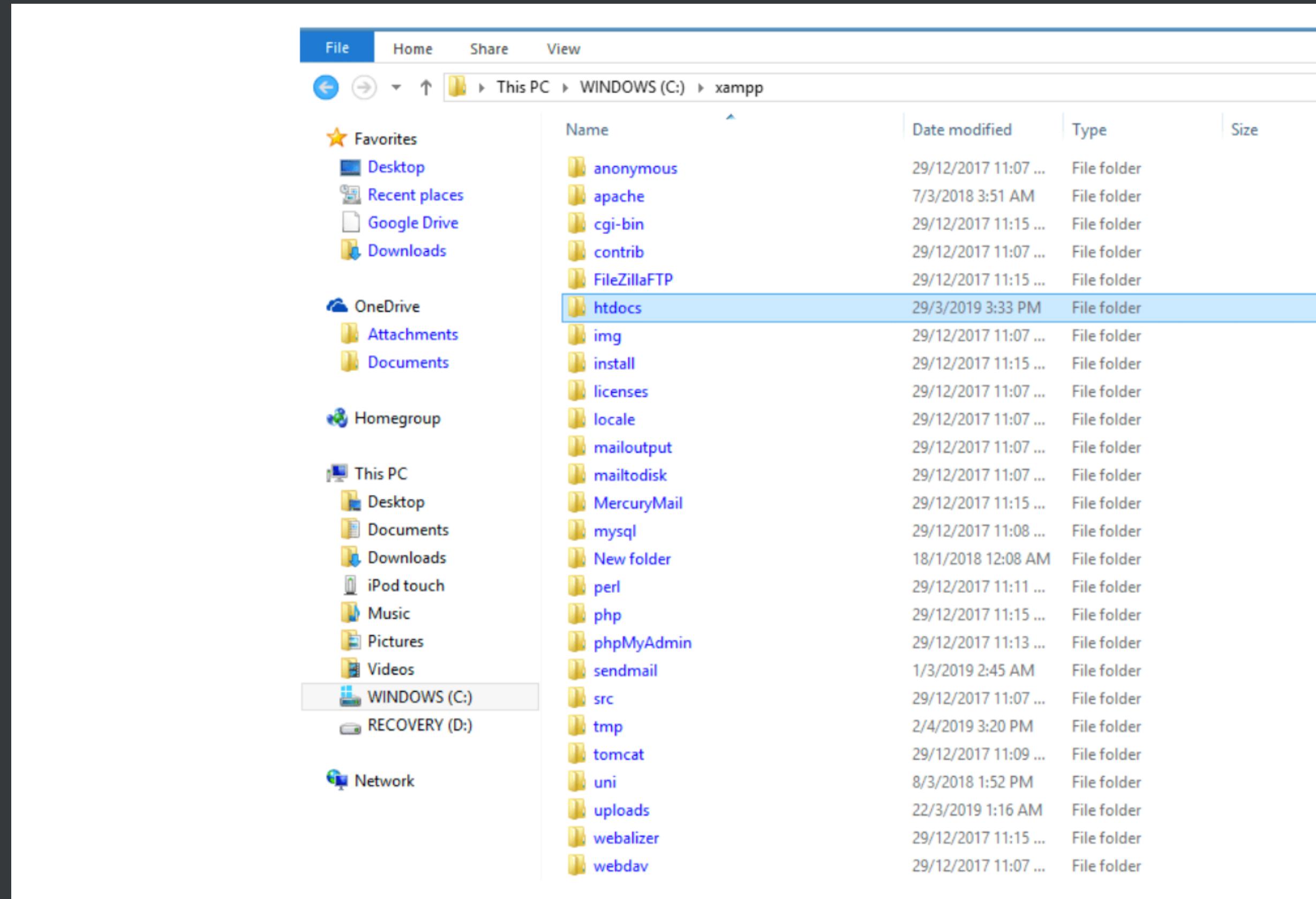
XAMPP Control Panel v3.2.2

Service	Module	PID(s)	Port(s)	Actions
	Apache	6384 21924	80, 443	Stop Admin Config Logs
	MySQL	14168	3306	Stop Admin Config Logs
	FileZilla			Start Admin Config Logs
	Mercury			Start Admin Config Logs
	Tomcat			Start Admin Config Logs

[Config](#) [Netstat](#) [Shell](#) [Explorer](#) [Services](#) [Help](#) [Quit](#)

```
1:21:15 PM [main] Initializing Control Panel
1:21:15 PM [main] Windows Version: Enterprise 64-bit
1:21:15 PM [main] XAMPP Version: 7.2.9
1:21:15 PM [main] Control Panel Version: 3.2.2 [ Compiled: Nov 12th 2015 ]
1:21:15 PM [main] You are not running with administrator rights! This will work for
most application stuff but whenever you do something with services
there will be a security dialogue or things will break! So think
about running this application with administrator rights!
1:21:15 PM [main] XAMPP Installation Directory: "s:\xampp\" 
1:21:15 PM [main] Checking for prerequisites
1:21:16 PM [main] All prerequisites found
1:21:16 PM [main] Initializing Modules
1:21:16 PM [main] Starting Check-Timer
1:21:16 PM [main] Control Panel Ready
1:21:18 PM [Apache] Attempting to start Apache app...
1:21:18 PM [Apache] Status change detected: running
1:21:20 PM [mysql] Attempting to start MySQL app...
1:21:21 PM [mysql] Status change detected: running
```

Install dir



The screenshot shows a Windows File Explorer window with the following details:

- File Bar:** File, Home, Share, View.
- Address Bar:** This PC > WINDOWS (C:) > xampp
- Favorites:** Desktop, Recent places, Google Drive, Downloads.
- OneDrive:** Attachments, Documents.
- Homegroup:** This PC, Desktop, Documents, Downloads, iPod touch, Music, Pictures, Videos.
- Drives:** WINDOWS (C:), RECOVERY (D:).
- Network:** None.
- Content Area:** A list of files and folders in the xampp directory. The "htdocs" folder is selected and highlighted with a blue border.

Name	Date modified	Type	Size
anonymous	29/12/2017 11:07 ...	File folder	
apache	7/3/2018 3:51 AM	File folder	
cgi-bin	29/12/2017 11:15 ...	File folder	
contrib	29/12/2017 11:07 ...	File folder	
FileZillaFTP	29/12/2017 11:15 ...	File folder	
htdocs	29/3/2019 3:33 PM	File folder	
img	29/12/2017 11:07 ...	File folder	
install	29/12/2017 11:15 ...	File folder	
licenses	29/12/2017 11:07 ...	File folder	
locale	29/12/2017 11:07 ...	File folder	
mailoutput	29/12/2017 11:07 ...	File folder	
mailtodisk	29/12/2017 11:07 ...	File folder	
MercuryMail	29/12/2017 11:15 ...	File folder	
mysql	29/12/2017 11:08 ...	File folder	
New folder	18/1/2018 12:08 AM	File folder	
perl	29/12/2017 11:11 ...	File folder	
php	29/12/2017 11:15 ...	File folder	
phpMyAdmin	29/12/2017 11:13 ...	File folder	
sendmail	1/3/2019 2:45 AM	File folder	
src	29/12/2017 11:07 ...	File folder	
tmp	2/4/2019 3:20 PM	File folder	
tomcat	29/12/2017 11:09 ...	File folder	
uni	8/3/2018 1:52 PM	File folder	
uploads	22/3/2019 1:16 AM	File folder	
webalizer	29/12/2017 11:15 ...	File folder	
webdav	29/12/2017 11:07 ...	File folder	

Language Basics



Basics

```
// Single line comment
# Single line comment
/*
Multiline
comment
*/
#VARIABLES
/*
- Prefix $
- Start with letter or an _
- Only letters, numbers and underscores
- Case sensitive
*/
#DATA TYPES
/*
String
Integers
floats
Booleans
Arrays
Objects
NULL
Resource
```

Variables

```
$_utput = 'Hello World!';  
$num1 = 4;  
$num2 = 10;  
$float1 = 4.4;  
$bool1 = true;  
$sum = $num1 + $num2;  
$string1 = 'Hello';  
$string2 = 'World';  
$greeting = $string1.' '. $string2.'!' ;  
$greeting2 = "$string1 $string2";  
  
$string3 = "They\re Here";  
  
define('GREETING', 'Hello Everyone');
```

Arrays

```
//Indexed  
$people = array('Kevin', 'Jeremy', 'Sara');  
$ids = array(23, 55, 12);  
$cars = ['Honda', 'Toyota', 'Ford'];  
$cars[3] = 'Chevy';  
$cars[] = 'BMW'; //Add to the end of array
```

Arrays

```
//Associative arrays
$people = array('Brad' => 35, 'Jose' => 32, 'William' => 37);
//echo $people['Brad'];
$ids = [22 => 'Brad', 44 => 'Jose', 63 => 'William'];
```

```
//Multi-Dimensional
$cars = array(
    array('Honda', 20, 10),
    array('Toyota', 30, 20),
    array('Ford', 23, 12)
);
echo $cars[1][0];
```

Loops

```
for ( $i=0;$i<=10;$i++) {  
    echo 'Number '.$i;  
    echo '<br/>';  
}
```

```
$i = 0;  
while($i < 10) {  
    echo $i;  
    $i++;  
}
```

```
$i=0;  
do {  
    echo $i;  
    echo '<br/>';  
    $i++;  
} while ( $i <10);
```

Loops

```
#Foreach Loop – For arrays
$people = ['Brad', 'Jose', 'William'];

foreach( $people as $person ) {
    echo $person;
    echo '<br/>';
}

$people = ['Brad' => 'brad@gmail.com', 'Jose' => 'jose@gmail.com',
'William' => 'william@yahoo.com'];

foreach( $people as $person => $email ) {
    echo $person.': '.$email;
    echo '<br/>';
}
```

Conditionals

```
$num = 6;  
if($num == 5) {  
    echo '5 passed';  
} elseif ( $num == 6) {  
    echo '6 passed';  
}  
else {  
    echo 'did not pass';  
}
```

```
$favColor = 'red';  
  
switch($favColor) {  
    case 'red':  
        echo 'Your favorite color is red';  
        break;  
    case 'blue':  
        echo 'Your favorite color is blue';  
        break;  
    case 'green':  
        echo 'Your favorite color is green';  
        break;  
    default:  
        echo 'Your favorite color is something else';  
        break;
```

Functions

```
//Simple function
function sayHello($name = 'World') {
    echo "Hello $name<br/>";
}

sayHello("Bill");

function addNumbers($num1, $num2) {
    return $num1 + $num2;
}

//Run simple function
echo addNumbers(2,3);

//By Reference
$myNum = 10;
function addTen (&$num) {
    $num +=10;
}

addTen($myNum);
echo "Value: $myNum<br/>";
```

Dates

```
// Set Time Zone  
date_default_timezone_set('Europe/Bucharest');  
echo date('h:m:s a')."<br/>";  
  
$timestamp = mktime(03,10,12,4,20,1980);  
echo $timestamp."<br/>";  
  
echo date('m/d/Y', $timestamp)."<br/>";  
  
$timestamp2 = strtotime('7:00pm March 22 2016');  
  
$timestamp3 = strtotime('tomorrow');  
$timestamp4 = strtotime('next Sunday');  
$timestamp5 = strtotime('+2 days');  
$timestamp6 = strtotime('-2 weeks');  
  
echo date('m/d/Y h:i:sa', $timestamp6)."<br/>";
```

String functions

```
$output = substr('Hello',1,3);
# Returns the length of a string
$output = strlen('Hello World');
#Strips whitespace
echo trim('Hello world ') ;
echo strtoupper('Hello World');
echo strtolower('Hello World');
$output = ucwords('hello world how are you d');

$text = 'Hello World';
$output = str_replace('World', 'Everyone', $text);

$val = 'Hello';
$output = is_string($val);
```

Superglobals

\$GLOBALS
\$_SERVER
\$_GET
\$_POST
\$_FILES
\$_COOKIE
\$_SESSION
\$_REQUEST
\$_ENV

Include and require

```
#Script will continue to execute if error is found
<?php include('inc/header.php'); ?>
<h1>Contact</h1>
<?php include_once('inc/footer.php'); ?>

#Script will stop execution if error is found
<?php require_once('inc/header.php'); ?>
<h1>Home1</h1>
<?php require_once('inc/footer.php') ; ?>
```

OOP

```
#Script will continue to execute if error is found  
<?php include('inc/header.php'); ?>
```

```
    <h1>Contact</h1>
```

```
    <?php include_once('inc/footer.php'); ?>
```

```
#Script will stop execution if error is found
```

```
<?php require_once('inc/header.php'); ?>
```

```
    <h1>Home1</h1>
```

```
    <?php require_once('inc/footer.php') ; ?>
```

OOP

```
<?php
class dog {
    public $name;

    public function __construct($nametext) {
        $this ->name = $nametext;
    }
    public function bark() {
        echo 'Woof!';
    }
}
?>
```

OOP

```
<?php
require_once('Dog.php');
require_once('Poodle.php');
$puppy = new dog('Lupu');
$puppy->name = 'Rover';
echo $puppy->name." says ";
$puppy->bark();

$poodle = new poodle('Little');

$poodle->bark();
$poodle->set_type(22);
echo $poodle->type;
?>
```

OOP

```
<?php  
class poodle extends dog {  
    public $type;  
    public function set_type($height) {  
        if($height<10) {  
            $this->type = 'Toy';  
        } elseif($height>15) {  
            $this->type = 'Standard';  
        } else {  
            $this->type = 'Miniature';  
        }  
    }  
?>
```

Get & Post

```
if(isset($_GET['name'])) {  
    $name = htmlentities($_GET['name']);  
    echo $name;  
}  
  
if(isset($_POST['name'])) {  
    $name = htmlentities($_POST['name']);  
    echo $name;  
}  
  
if(isset($_REQUEST['name'])) {  
    $name = htmlentities($_REQUEST['name']);  
    echo $name;  
}  
  
<form method="GET" action="get_post.php">  
    <div>  
        <label for="">Name</label><br>  
        <input type="text" name="name" id="">  
    </div>  
    <div>  
        <label for="">Email</label><br>  
        <input type="text" name="email">  
    </div>  
    <input type="submit" value="Submit">  
</form>
```

Filters and validation

```
if(filter_has_var(INPUT_POST, 'data')) {
    $email = $_POST['data'];
    //Remove illegal characters
    $email = filter_var($email, FILTER_SANITIZE_EMAIL);
    echo $email.'<br>';
    //Validate email address
    if(filter_var($email, FILTER_VALIDATE_EMAIL)) {
        echo 'Email is valid';
    } else {
        echo 'Email is not valid';
    }
}
```

Filters and validation

```
$filters = array("data" => FILTER_VALIDATE_EMAIL,  
                 "data2" => array(  
                     "filter" => FILTER_VALIDATE_INT,  
                     "options" => array(  
                         "min_range" =>1,  
                         "max_range" =>100  
                     )  
                 )  
 );  
  
print_r(filter_input_array(INPUT_POST, $filters));
```

Sessions

```
session_start();
$_SESSION["username"]="Daniel";
unset($_SESSION["username"]);
session_unset(); //Unsets all variables
session_destroy(); //Effect on other pages
```

```
<?php
    echo $_SESSION["username"];
?
</body>
```

Cookies

```
//set 1h cookie
setcookie('username', $username, time() + 3600);
//Update cookie
setcookie('username', "Andrei", time() + (86400 * 30));
//Delete cookie
setcookie('username', "Andrei", time() - 3600);

//Storing array into a cookie
$user = ['name' => 'Brad', 'email' => 'daniel@gmail.com',
          'age' => 35];
$user = serialize($user);
setcookie('user', $user, time() + 3600);
```

Files

```
<?php
// Specify the file path
$file_path = "example.txt";

// Text to be written to the file
$text_to_write = "Hello, this is some text written to the file!";

// Open the file in write mode. If the file doesn't exist, it will be created.
$file_handle = fopen($file_path, 'w');

// Check if the file was opened successfully
if ($file_handle === false) {
    echo "Failed to open/create the file.";
} else {
    // Write the text to the file
    if (fwrite($file_handle, $text_to_write) === false) {
        echo "Failed to write to the file.";
    } else {
        echo "Text has been written to the file successfully.";
    }
}

// Close the file handle
fclose($file_handle);
}

?>
```

Error handling

```
<?php
// Specify the file path
$file_path = "example.txt";

// Text to be written to the file
$text_to_write = "Hello, this is some text written to the file!";

try {
    // Open the file in write mode. If the file doesn't exist, it will be created.
    $file_handle = fopen($file_path, 'w');

    if ($file_handle === false) {
        throw new Exception("Failed to open/create the file.");
    }

    // Write the text to the file
    if (fwrite($file_handle, $text_to_write) === false) {
        throw new Exception("Failed to write to the file.");
    }

    // Close the file handle
    fclose($file_handle);

    echo "Text has been written to the file successfully.";
} catch (Exception $e) {
    echo "An error occurred: " . $e->getMessage();
}
?>
```

Exerciții

**“EDUCATION IS OUR
PASSPORT FOR THE FUTURE,
FOR TOMORROW BELONGS
ONLY TO THE PEOPLE THAT
PREPARE FOR IT TODAY.”**

— Malcom X