Assesment Exercise for Getting started and Introduction of PHP

1. Steps(with command and screenshots) for installing apache.

Answer 1:


```
abhinesh@abhinesh:~ $ sudo apt-get install apache2
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap
0 upgraded, 8 newly installed, 0 to remove and 4 not upgraded.
Need to get 1,604 kB of archives.
After this operation, 6,493 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```



```
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /lib/systemd/system/apache-htcacheclean.service.
Processing triggers for libc-bin (2.27-3ubuntu1) ...
Processing triggers for systemd (237-3ubuntu10.38) ...
Processing triggers for man-db (2.8.3-2ubuntu0.1) ...
Processing triggers for ufw (0.36-0ubuntu0.18.04.1) ...
Processing triggers for ureadahead (0.100.0-21) ...
ureadahead will be reprofiled on next reboot
abhinesh@abhinesh:~ $
```

2. Installation steps(with command and screenshots) PHP and print current version

Answer 2:

```
File Edit View Search Terminal Help
abhinesh@abhinesh:~ $ sudo apt install php libapache2-mod-php
[sudo] password for abhinesh:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libapache2-mod-php7.2 php-common php7.2 php7.2-cli php7.2-common php7.2-json
  php7.2-opcache php7.2-readline
Suggested packages:
  php-pear
The following NEW packages will be installed:
  libapache2-mod-php libapache2-mod-php7.2 php php-common php7.2 php7.2-cli
  php7.2-common php7.2-json php7.2-opcache php7.2-readline
0 upgraded, 10 newly installed, 0 to remove and 4 not upgraded.
Need to get 3,870 kB of archives.
After this operation, 17.2 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

```
^C
abhinesh@abhinesh:~ $ php --version
PHP 7.2.24-0ubuntu0.18.04.2 (cli) (built: Jan 13 2020 18:39:59) ( NTS )
Copyright (c) 1997-2018 The PHP Group
Zend Engine v3.2.0, Copyright (c) 1998-2018 Zend Technologies
    with Zend OPcache v7.2.24-0ubuntu0.18.04.2, Copyright (c) 1999-2018, by Zend Technologies
abhinesh@abhinesh:~ $
```

3. Installation steps(with command and screenshots) MySQL and print the current version

Answer 3:

```
Terminal
File Edit View Search Terminal Help
abhinesh@abhinesh:~ $ sudo apt-get install mysql-server
Reading package lists... Done
Building dependency tree
Reading state information... Done
mysql-server is already the newest version (5.7.29-0ubuntu0.18.04.1).
0 upgraded, 0 newly installed, 0 to remove and 4 not upgraded.
abhinesh@abhinesh:~ $
```

```
                                                        Terminal
 File  Edit  View  Search  Terminal  Help
abhinesh@abhinesh:~ $ mysql -V
mysql  Ver 14.14 Distrib 5.7.29, for Linux (x86_64) using  EditLine wrapper
abhinesh@abhinesh:~ $ █
```

4. What is HTTP?

Answer 4:

Hyper Text Transfer Protocol is an application layer protocol for transmitting hypermedia documents, such as HTML. It was designed for communication between web browsers and web servers, but it can also be used for other purposes. HTTP follows a classical client-server model , with a client opening a connection to make a request, then waiting until it receives a response. HTTP is a stateless protocol, meaning that the server does not keep any data (state) between two requests.

5. What domain name will have the following address – 127.0.0.1

Answer 5: 127.0. 0.1 is the loopback Internet protocol (IP) address also referred to as the localhost. The address is used to establish an IP connection to the same machine or computer being used by the end-user .

6. What language should you use for writing queries for the database?

Answer 6: While almost all programming languages can connect to and exchange information with an SQL database, PHP has a special relationship with this language—especially through the MySQLi DBMS (The "i" stands for "improved"). In fact, PHP and MySQLi work so well together on Linux Apache systems .

7. Which command is used for restart apache

Answer 7:

File Edit View Search Terminal Help
```
abhinesh@abhinesh:~ $ mysql -V
mysql  Ver 14.14 Distrib 5.7.29, for Linux (x86_64) using  EditLine wrapper
abhinesh@abhinesh:~ $ sudo service apache2 restart
abhinesh@abhinesh:~ $
```

8. Print fibonacci series

Answer 8:

```php
<?php
1
2
3  function Fibonacci($n){
4  $num1 = 0;
5  $num2 = 1;
6  $counter = 0;
7  while ($counter < $n){
8  echo ' '.$num1;
9  $num3 = $num2 + $num1;
10 $num1 = $num2;
11 $num2 = $num3;
12 $counter = $counter + 1;
13 }
14 }
15 $n = 10;
16 Fibonacci($n);
17
18
```

Run Code

```
12 $counter = $counter + 1;
13 }
14 }
15 $n = 10;
16 Fibonacci($n);
17
18
```

Run Code

0 1 1 2 3 5 8 13 21 34

ⓘ ✕

● Print 1 & 6 using **foreach** in array(1, 2, 3, 4, 5, 6, 7)

```php
<?php
1  $numbers= array(1, 2, 3, 4, 5,6);
2
3   foreach($numbers as $value){
4       if ($value ==1 or $value ==6)
5
6       echo $value ."<br>";
7       else
8            echo "";
9
10 }
```

Run Code

```
1
6
```

● Print 1 2 3 4 using **break** and **foreach** in array(1, 2, 3, 4, 5, 6, 7)

```php
<?php
1  $numbers= array(1, 2, 3, 4, 5,6);
2
3   foreach($numbers as $value){
4
5
6       echo $value ."<br>";
7       if ($value ==4)
8            break;
9       else
10           echo "";
11
12 }
```

Run Code

```
1
2
3
4
```

- Using **switch case**, check if value ($value = 4) is greater than 5 or not. Case should be 1, 2, 3, 4, 5, 6.

```php
<?php
1   $d=5;
2   switch ($d) {
3       case 1:
4           echo "1 is less than 4!<br>";
5           break;
6       case 2:
7           echo "2 is less than 4!<br>";
8           break;
9       case 3:
10          echo "3 is less than 4 !<br>";
11          break;
12      case 4:
13          echo "4 is equals 4!<br>";
14          break;
15      case 5:
16          echo "5 is greater than 4!<br>";
17          break;
18      case 6:
```

Run Code

```php
16          echo "5 is greater than 4!<br>";
17          break;
18      case 6:
19          echo "6 is greater than 4!<br>";
20          break;
21      case 7:
22          echo "Its a Sunday!!<br>";
23          echo "Its a Holiday!!<br>";
24          break;
25  }
```

Run Code

5 is greater than 4!

- Create and print an **infinite** loop.

e Edit Selection View Go Debug Terminal Help

🐘 switch.php   🐘 infiniteloop.php ✕

home > abhinesh > Downloads > php > 🐘 infiniteloop.php
```php
1   <?php
2       while(1){
3           echo "infinite loop";
4       }
5
6   ?>
```

- Create a script that displays 1-2-3-4-5-6-7-8-9-10 on one line. There will be **no hyphen**(-) at the starting and ending position.

- Using **Alternative syntax** print values of array(1, 2, 3, 4, 5, 6, 7)

- Print 1,2,3,6,7 from array(1, 2, 3, 4, 5, 6, 7)

home > abhinesh > Downloads > php > 14ignore.php

```php
1    <?php
2    $numbers= array(1,2,3,4,5,6);
3    foreach ($numbers as $value)
4    {
5
6        if ($value ==4 or $value ==5)
7        echo "";
8        else
9            echo $value ."\n";
10    }
11    unset($value);
12    ?>
```

File Edit View Search Terminal Help

```
abhinesh@abhinesh:~ $ php /home/abhinesh/Downloads/php/14ignore.php
1
2
3
6
abhinesh@abhinesh:~ $ ▮
```
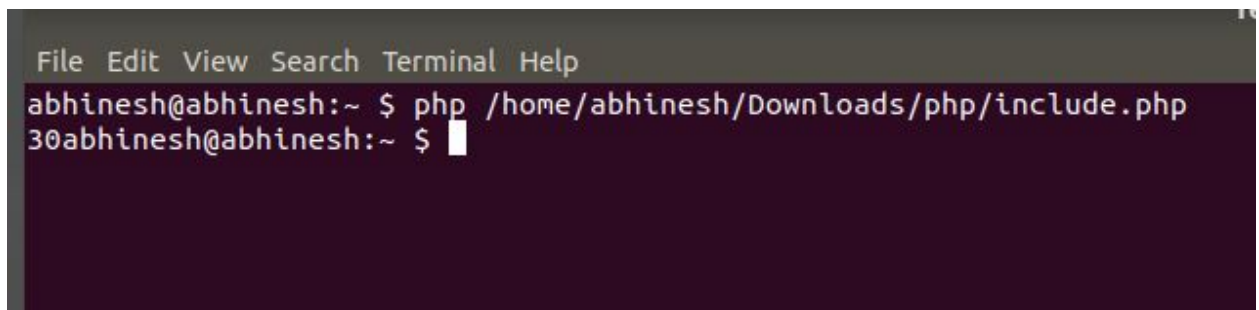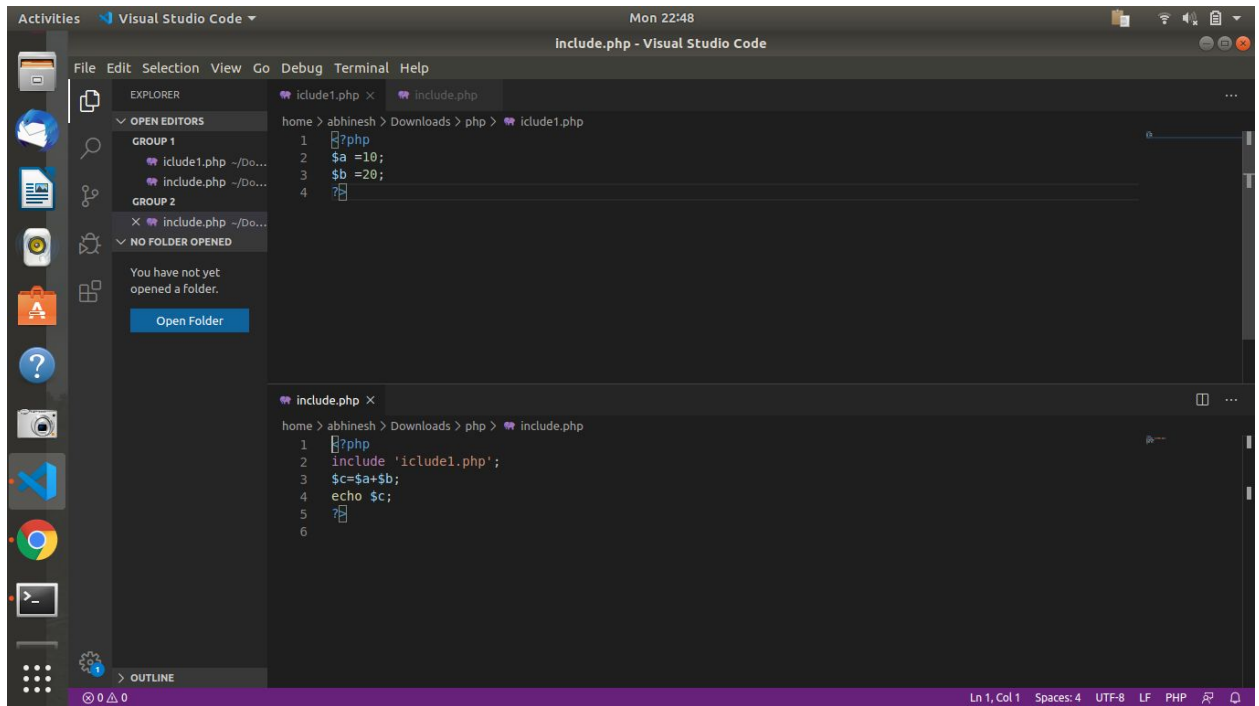
- Create a function to calculate **factorial value** of a number. Use this function to get factorial of 5.

```php
<?php
function fact ($n)
{
    if($n <= 1)
    {
        return 1;
    }
    else
    {
        return $n * fact($n - 1);
    }
}

echo "Factorial of 5 is " .fact(5);
?>
```
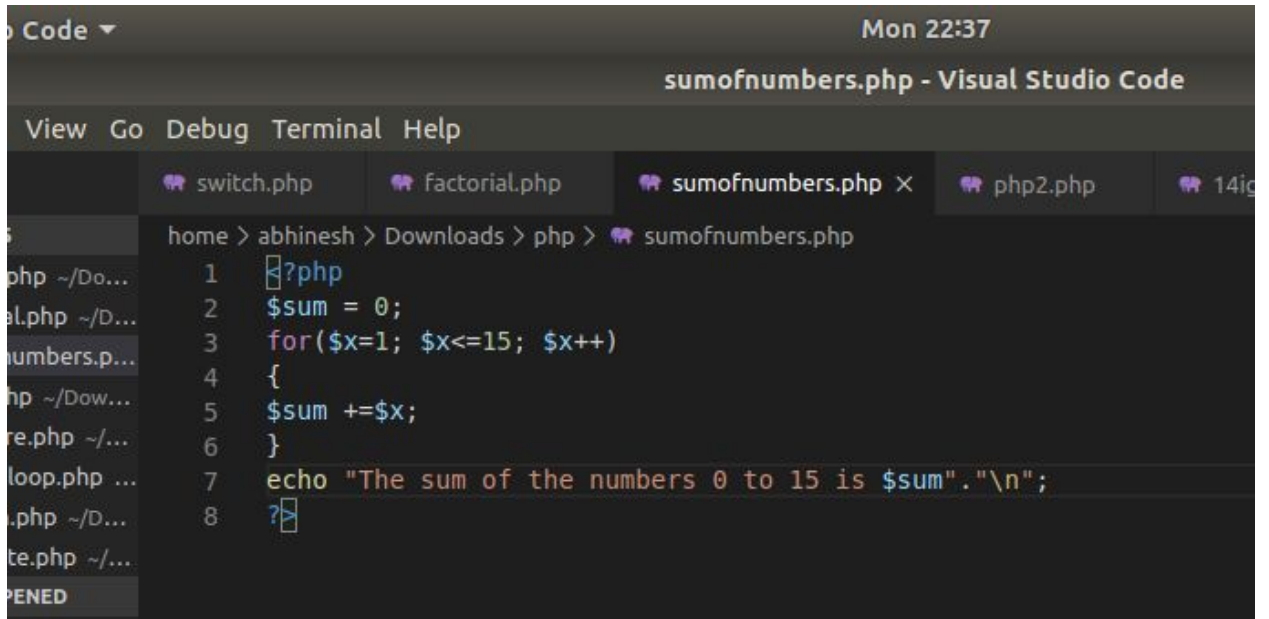
File Edit View Search Terminal Help
```
abhinesh@abhinesh:~ $ php /home/abhinesh/Downloads/php/factorial.php
    Factorial of 5 is 120   abhinesh@abhinesh:~ $ 
```
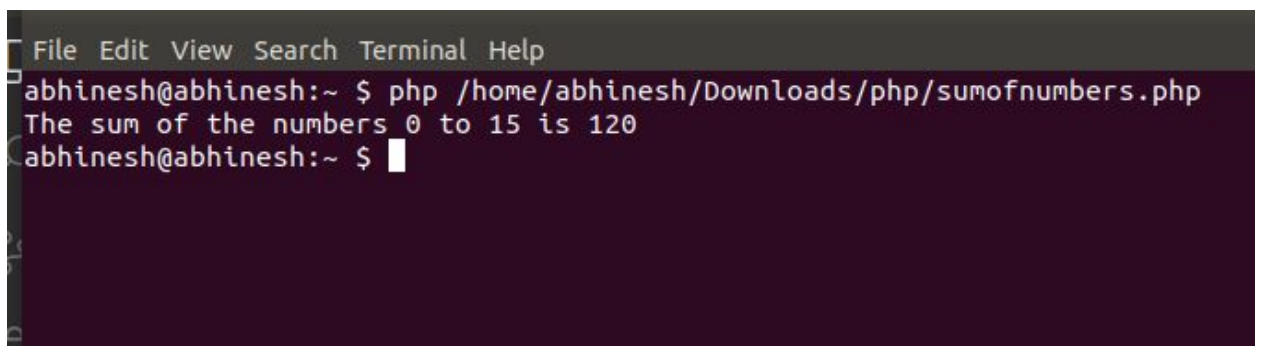
- Include a PHP file (abc.php) in another file (xyz.php) and use **variables** from abc.php in xyz.php

- Using loop find the **sum** of numbers from 1 to 15.

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🐘 switch.php   🐘 factorial.php   🐘 sumofnumbers.php ✕   🐘 php2.php   🐘 14ig

home > abhinesh > Downloads > php > 🐘 sumofnumbers.php

```php
1    <?php
2    $sum = 0;
3    for($x=1; $x<=15; $x++)
4    {
5    $sum +=$x;
6    }
7    echo "The sum of the numbers 0 to 15 is $sum"."\n";
8    ?>
```

php ~/Do...
al.php ~/D...
numbers.p...
hp ~/Dow...
re.php ~/...
loop.php ...
.php ~/D...
te.php ~/...
PENED

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```
abhinesh@abhinesh:~ $ php /home/abhinesh/Downloads/php/sumofnumbers.php
The sum of the numbers 0 to 15 is 120
abhinesh@abhinesh:~ $ ▮
```

- Give examples of Print, printf, sprintf.