

```

<?php
/* This is multiline comment, just like in a C program
   Comments are ignored by compiler or interpreter
   And may help programmers understand the code better

   Linux, shortcut keys to open terminal
       Press all keyboard keys together, ctrl alt t

   (Unlike taskbar in Windows,
       visible as horizontal bar at the bottom)
   Docker, Launcher, on Ubuntu, available on left side
       as vertical column

   User opened applications like terminal, gedit, firefox
       will be visible on Dock, Launcher
*/
?>

<?php
/* By default, gedit saves files in directory /home/username

   When writing a program, first job save code
       with file name followed by . and file extension
   For PHP programs, save code with file extension of .php
   Where: /var/www/html/
       First "/" is also called as "root" folder
       Code would be saved in: /var/www/html/code.php
*/
?>

<?php
/* How:
   If writing code in gedit, "save as" option under ≡
       ≡ → save as → bottom left has "other location"
       Other location → Computer (or /) → var → www → html
   Or
   Files (File browser)
       Right click on code.php
       use cut, click on Cut
       and
       paste, right click and Paste into
       after file browsing to folder /var/www/html
   Or
   If comfortable with terminal and commands
       use mv, move command, $ mv source destination
       $ mv code.php /var/www/html/
       or use cp, copy command, $ cp source destination
       $ cp code.php /var/www/html/

   If code.php does not have errors, and Apache httpd
       daemon is running, and php is installed
       code.php can be accessed through Mozilla Firefox
       Firefox(Web browser)
           in "address bar", type URL
           http://localhost/code.php
           or
           http://127.0.0.1/code.php
           and enter ↵ or click →
*/
?>

```

```
<?php
/*
```

If code.php has errors, check error description on terminal  
\$ php code.php  
read, understand, and correct error and retry

make sure code.php is saved in current/working directory  
and  
current/working directory is /var/www/html/

To check current/working directory, on terminal  
\$ pwd

To check files in current directory, on terminal  
\$ ls  
ls, list directory contents, code.php should be listed

To change directory,  
Using Files (File browser)  
Browse to /var/www/html  
Right click in displayed folder area  
other than on file/folder

Open in terminal  
or  
Using terminal, and command,  
cd, Change the shell working directory  
\$ cd /var/www/html

```
*/
?>
```

```
<?php
/*
```

Suggestions, common errors

Consider you are writing C, or JavaScript  
End statements, expressions with semicolon ;

Important changes in PHP:  
Variable name begin with dollar symbol \$  
and are dynamically typed, type decided on context

Indentation  
Though not a part of syntax like Python  
But please use indentation, like you would in py  
  
Can be by use of tab key of keyboard  
or  
Four spaces, by use of spacebar key of keyboard

Not a part of syntax, but  
please do not code entire program beginning on  
same column  
entire code should not begin on same column

```
*/
?>
```

```

<?php
/* 1 a.
   Develop a PHP program to calculate areas of Triangle and
   Rectangle.
*/
// variable names begin with $
$base = 4; // considering same base and height for both
$height = 3; // triangle and rectangle
// statements, expressions end in ;
$area_of_tri = (1/2) * $base * $height; // why is area of triangle
$area_of_rect = $base * $height; // half of rectangle
// why is area of rectangle base * height
// echo, function to print text, and value of variable
// <br/> element of html, display text on a new line on web browser
echo "<br/> For base = $base, and height = $height";
echo "<br/> Area of triangle = $area_of_tri";
echo "<br/> Area of rectangle = $area_of_rect";

// Please observe change of color for variable names, functions
// provided program is being written in gedit, or
// IDE that recognises PHP, like geany

// Output of php code will be markup of html intended for web browser
?>

```

```

<?php
/* Save program as
   la_area.php
   in
   /var/www/html

   And access on Mozilla Firefox web browser
   through URL in address bar as

   http://localhost/la\_area.php

   Will work, if no syntax errors in PHP code
*/
/*
   To check errors, on terminal,
   but being in same working directory as program
   $ php la_area.php

   Can use tab key of keyboard to auto complete
   $ php          $ php la
   and click tab, auto completes if unique name
   $ php la_area.php
   and enter ↵
   to check errors if any, or output on terminal
*/
?>
<!-- This is comment in HTML, will not be displayed on web browser
      but is present in html markup, Right click, View Page Source
-->
<?php
/* Same programs need not be followed
   If you feel programs are lengthy and complicated
   and can simplify, improve, please do
   as long as programs satisfy problem definitions

   PHP Programming, problem definitions, please refer syllabus
   https://vtu.ac.in/pdf/2022\_3to8/2aimlsyll.pdf
*/
?>

```