

```

<?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
   1a_area.php
in
   /var/www/html

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

http://localhost/1a\_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 1a_area.php

Can use tab key of keyboard to auto complete
$ php          $ php 1a
               and click tab, auto completes if unique name
$ php 1a_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
*/
?>

```