PHP (Hypertext Pre Processor)

PHP is a server-side scripting language (like CGI, ASP). PHP script is part of your HTML page, and is processed by a web server. The web server on CCC is configured to work with PHP.

Any PHP script needs to begin with the line
#!/usr/local/bin/php
PHP scripts that do not begin with this line will not run. An exception to this rule is: if you are including a .php file into a .php file, the above line should be at the top of the first .php file, and NOT in the included one. Failure to do so will result in that line displaying on the actual web page.

Let us check some sample PHP code. In your public_html directory, create a file, test.php with the following code.

```
#!/usr/local/bin/php
<html>
  <body>
    <?php
      $myvar="Hello World!";
      echo $myvar;
    ?>
  </body>
</html>
```

Ensure that php file has permissions 755. Also your public_html directory, as well as your home directory must have permissions set to 755.

Now in a browser, load the URL: http://users.wpi.edu/~mmani/test.php (replace mmani with your user name)

Let us create another php file, test1.php as
```
#!/usr/local/bin/php
<html>
  <body>
    <?php phpinfo (); ?>
  </body>
</html>
```

Look up more about PHP from the following sites:
- http://www.wpi.edu/Academics/CCC/Help/Unix/Webdev
- http://www.php.net

PHP and mySQL

PHP provides several inbuilt functions to support database access. It supports multiple database systems such as mySQL, Oracle, Microsoft SQL Server etc. The PHP on CCC is configured to work with mySQL.

PHP to query tables

Assume our mySQL database has a table a (a1 int, a2 int) with four rows as (1, 1), (2, 2), (3, 3), (4, 4). To display this table as below, we write the following code.

Column1	Column2
1	1
2	2
3	3
4	4

Create password.php with permissions 600 as:
```
<?php
$db_name=your_dbname;
$db_host="mysql.wpi.edu";
$db_username=your_userid;
$db_pw=your_password;
?>
```

Create test1.php with permissions 755 as:

```
#!/usr/local/bin/php
<html>
<head><title>Display a Table</title></head>
<body>
<?php

include_once ("password.php"); /* password in a separate file for
safety issues */

$db = mysql_connect ($db_host, $db_username, $db_pw); /* Connect to
database */
mysql_select_db ($db_name, $db); /* Select the database */

$result = mysql_query ("SELECT * FROM a", $db); /* Run a SQL Query */

/* Fetch each row and print it in a table format in HTML */
if ($myrow = mysql_fetch_array ($result)) {
     echo "<table border=1>\n";
     echo "<tr><th>Column1</th><th>Column2</th></tr>\n";
     do {
          printf ("<tr><td>%s</td><td>%s</td></tr>\n", $myrow ["a1"],
$myrow ["a2"]);
```

```
      } while ($myrow = mysql_fetch_array ($result));
} else {
      echo "Sorry, no records were found !";
}
?>
</body></html>
```

Run the above code by opening the URL: users.wpi.edu/~mmani/test1.php; the table will be displayed.

PHP to update a table

Create test2.php with permission 755 as:

```
#!/usr/local/bin/php
<html>
<head><title>Insert a Row</title></head>
<body>
<?php

include_once ("password.php"); /* password in a separate file for
safety issues */

if ($submit) {
      // process form
      $db = mysql_connect ($db_host, $db_username, $db_pw); /* Connect
to database */
      mysql_select_db ($db_name, $db); /* Select the database */
      $sql="INSERT INTO a VALUES ('$a1', '$a2')";
      $result = mysql_query ($sql); /* Run a SQL Query */
      echo "Thank you! Information entered.\n";
} else {
      // display form
      ?>
      <form method="post" action="<?php echo $PHP_SELF?>">
      A1: <input type="text" name="a1"/><br/>
      A2: <input type="text" name="a2"/><br/>
      <input type="Submit" name="submit" value="Enter Information"/>
      </form>

      <?php
} // end if
?>
</body></html>
```

Run the above code by opening the URL: users.wpi.edu/~mmani/test2.php; this will first display the form. Enter values, and then submit the form. Now again open the URL: users.wpi.edu/~mmani/test1.php; you will see the table with the new row added.

Other Resources
www.php.net
www.wpi.edu/Academics/CCC/Help/Unix/Webdev