

# PHP

Scripting Language



## Tags

```
<html>
<head><title>Test Web
  Page</title></head>
<body>
<h1> Test Page Heading
  </h1>
<?php
<p>
print "This text is inserted
  by PHP.";
print "<hr>";
?>
</body>
</html>
```



## Commenting PHP

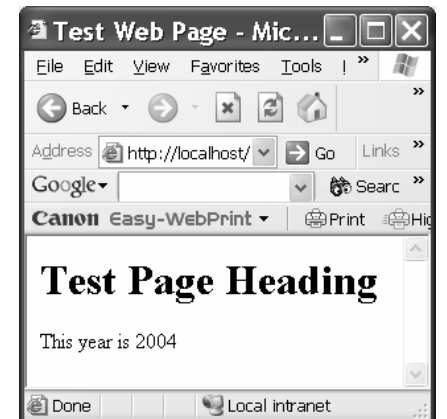
```
<html>
<head><title>Test Web Page</title></head>
<body>

<h1> Test Page Heading </h1>
<p>
<?php
// now let's be good programmers and
// comment this script
print "This text is inserted by PHP.";
print "<hr>";
?>
</body>
</html>
```

## Using Variables

```
<html>
<head><title>Test Web
  Page</title></head>
<body>

<h1> Test Page Heading </h1>
<p>
This year is
<?php
// now let's be good programmers and
// comment this script
$thisYear=2004;
print $thisYear;
?>
</body>
</html>
```



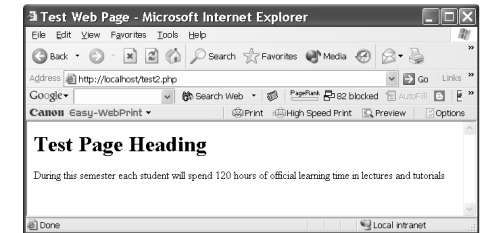
# Constants

```
<html>
<head><title>Test Web
Page</title></head>
<body>

<h1> Test Page Heading </h1>
<p>
This year is
<?php
// now let's be good programmers and
// comment this script
define("NAME"," Jane Jones");
$thisYear=2004;
print $thisYear;
print "<br>My name is ";
print NAME;
?>
</body>
</html>
```



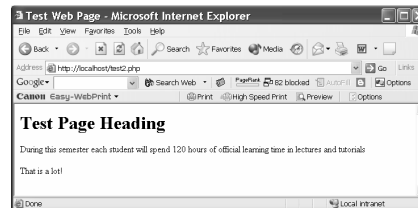
# Calculating



```
During this semester each student will spend
<?php
// now let's be good programmers and
// comment this script
define("lectures",20);
define("modules",4);
define("tutorials",10);
$hours = lectures*modules + tutorials*modules;
print $hours;
print " hours of official learning time in lectures and tutorials";
?>
```

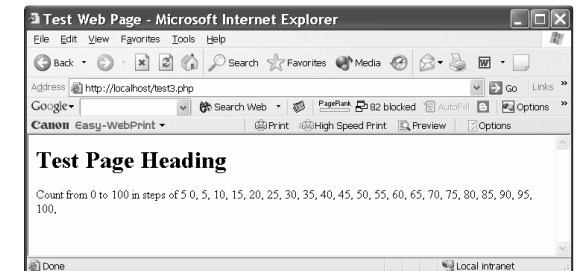
# If and Else

```
During this semester each student will spend
<?php
define("lectures",20);
define("modules",4);
define("tutorials",10);
$hours = lectures*modules + tutorials*modules;
print $hours;
print " hours of official learning time in lectures and tutorials";
print "<p>";
print "That is ";
if ($hours < 10) print "very little";
else {
    if ($hours < 80) print "not too bad";
    else print "a lot!";
}
?>
```



# For

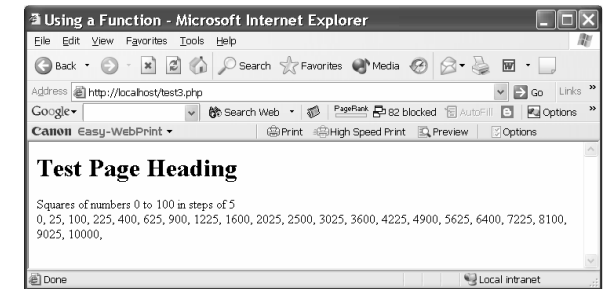
```
Count from 0 to 100 in steps of 5
<?php
// now let's be good programmers and
// comment this script
for ($counter = 0; $counter<101; $counter+=5)
{
    print $counter;
    print ", ";
}
?>
```



## Other Control Statements

- While
  - While (\$counter < 100) ...
- Switch
  - Switch(\$var)
  - {
    - Case "red";
      - Print "the colour is red";
  - }

## Functions



Squares of numbers 0 to 100 in steps of 5 <br><?php

```
function square($num) {
    $sq=$num*$num;
    print $sq;
}

for ($counter = 0; $counter<101; $counter+=5)
{
    square( $counter);
    print ", ";
}
?>
```

## Returning a Value

Squares of numbers 0 to 100 in steps of 5 <br><?php

```
function square($num) {
    $sq=$num*$num;
    return $sq;
}

for ($counter = 0; $counter<101; $counter+=5)
{
    print (square( $counter));
    print ", ";
}
?>
```

## Passing By Reference

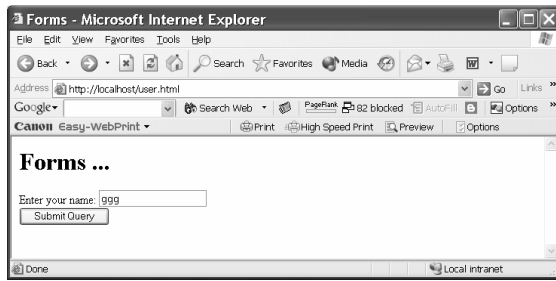
Squares of numbers 0 to 100 in steps of 5 <br><?php

```
function square(&$num) {

    $num=$num*$num;
}

for ($counter = 0; $counter<101; $counter+=5)
{
    $c = $counter;
    square($c);
    print ($c);
    print ", ";
}
?>
```

# Forms



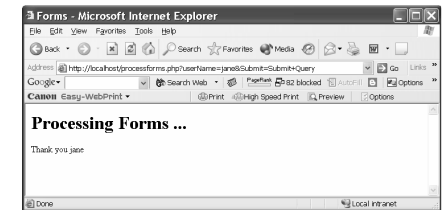
```
<html>
<head><title>Forms</title></head>
<body>

<h1> Forms ... </h1>
<p>
<form action="processforms.php" method="get">
Enter your name:
<input type="text" name="userName"><br>

<input type="Submit" name="Submit">
</form>

</body>
</html>
```

# Processing Form



```
<?php
if (empty($userName)) print "You did not enter a user
name";
else
{
    print "Thank you $userName<br>";
}
?>
```

# Accessing a Database

Table users	
Name	Mark
Jane	10
Jim	98
Joel	12
Janice	34
Jhantara	76
Jenny	87

# Connecting to the Database

```
$linkID=@mysql_connect("host", "user",
"password");
```

Check linkID afterwards to check for success  
if (\$linkID == FALSE) print "Couldn't establish the link  
to the database";

CLOSE THE CONNECTION

```
mysql_close($linkID);
```

## Select the Database

```
$linkID=@mysql_connect ("host", "user",  
    "password");  
  
if ($linkID == FALSE) print "Couldn't establish  
    the link to the database";  
else {  
    mysql_select_db("test",$linkID);  
}
```

## Query the Database

```
$query = "SELECT * FROM USERS";  
  
$resultID=mysql_query($query,$linkID);  
  
    if ($resultID ==FALSE) {  
        print "Could not carry out query:";  
        print $query;  
    }
```

## Processing the Result

```
if ($resultID !=FALSE) {  
  
    print "Results of query are:<br>";  
  
    while ($row = mysql_fetch_row($resultID)) {  
  
        foreach ($row as $field) {  
            print $field;  
            print " ,";  
        }  
        print "<br>";  
    }  
}
```

## Result!



## What does this do?

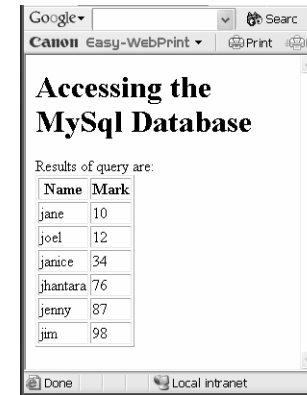
```
mysql_select_db("test",$linkID);
```

```
$resultID=mysql_query("Select * from users order by  
mark,name",$linkID);
```

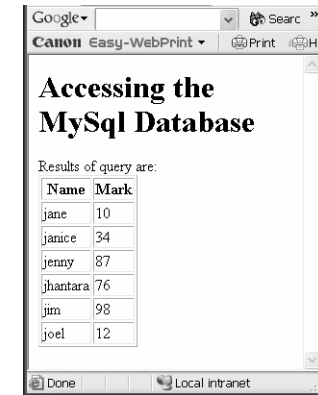
```
if ($resultID !=FALSE) {  
    print "Successful query<br><br>";  
    print "Results of query are:<br>";  
    while ($row = mysql_fetch_row($resultID)) {  
        foreach ($row as $field) {  
            print $field;  
            print " , ";  
        }  
        print "<br>";  
    }  
}
```

## Which One?

A

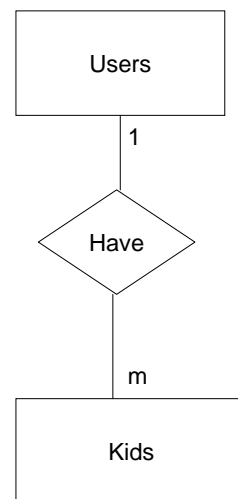


B



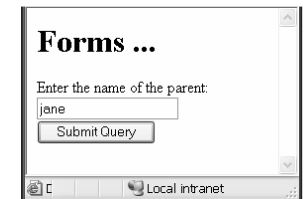
## Table kids

name	kidname
jane	ira
jane	isabel
jane	isaiah
janice	Xixo
jenny	lindiwe
jenny	lulu
jhantara	keagan
jhantara	keanu
jhantara	kiki
jim	marge
jim	mary
jim	myra



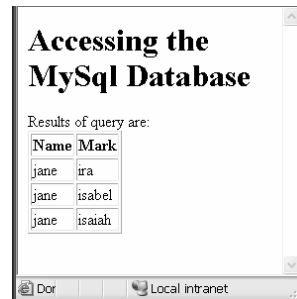
## Kids.html

```
<html>  
<head><title>Forms</title></head>  
<body>  
  
<h1> Forms ... </h1>  
<p>  
<form action="array.php" method="get">  
Enter the name of the parent:  
<input type="text" name="userName"><br>  
  
<input type="Submit" name="Submit">  
</form>  
  
</body>  
</html>
```



## Querying the database

```
$query = "Select * from kids where name='".$userName."'";  
$resultID=mysql_query($query,$linkID);  
if ($resultID !=FALSE) {  
    print "Results of query are:<br>";  
    print "<table border=1><tr><th>Name</th>";  
    print "<th>Child</th></tr>";  
    while ($row = mysql_fetch_row($resultID)) {  
        print "<tr>";  
        foreach ($row as $field) {  
            print "<td>$field</td>";  
        }  
        print "</tr>";  
    }  
}}
```



Accessing the MySQL Database

Results of query are:

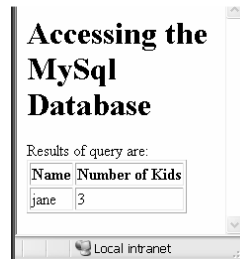
Name	Mark
jane	ira
jane	isabel
jane	isaiah

## Querying the database

```
$query = "Select count(*) as C from kids where name='".$userName."'";  
$resultID=mysql_query($query,$linkID);  
if ($resultID !=FALSE) {  
    print $userName  
    print "has"  
    $row = mysql_fetch_array($resultID);  
    print $row[ "C" ];  
}
```

## Fixing the output

```
$query = "Select count(*) as C from kids where  
name='".$userName."'";  
$resultID=mysql_query($query,$linkID);  
if ($resultID !=FALSE) {  
    print "Results of query are:<br>";  
    print "<table border=1><tr><th>Name</th>";  
    print "<th>Number of Kids</th></tr>";  
    print "<tr><td>$userName</td>";  
    $row = mysql_fetch_array($resultID);  
    print "<td>$row[ 'C' ]</td>";  
    print "</tr>";  
}
```



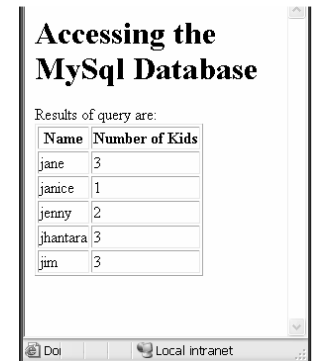
Accessing the MySQL Database

Results of query are:

Name	Number of Kids
jane	3

## How many kids each?

```
$query = "Select name, count(*) from kids group by name";  
$resultID=mysql_query($query,$linkID);  
if ($resultID !=FALSE) {  
    print "Results of query are:<br>";  
    print "<table border=1><tr><th>Name</th>";  
    print "<th>Number of Kids</th></tr>";  
    while ($row = mysql_fetch_row($resultID)) {  
        print "<tr>";  
        foreach ($row as $field) {  
            print "<td>$field</td>";  
        }  
        print "</tr>";  
    }  
}}
```



Accessing the MySQL Database

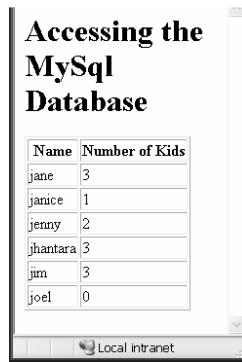
Results of query are:

Name	Number of Kids
jane	3
janice	1
jenny	2
jhantara	3
jim	3

## Using 2 queries

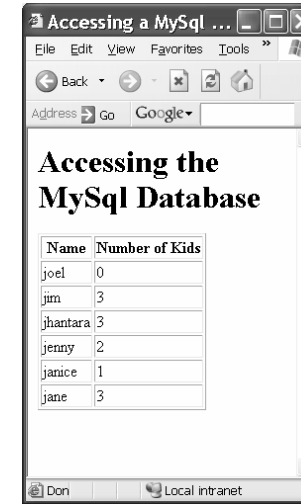
```
$query1 = "Select name from users";
$resultID=mysql_query($query1,$linkID);
if ($resultID !=FALSE) {
    // now work through the names
    print "<table border=1><tr><th>Name</th>";
    print "<th>Number of Kids</th></tr>";
    while ($row = mysql_fetch_object($resultID)) {
        print "<tr>";
        $nm = $row->name;
        $query2 = "Select count(*) as numKids from kids where name = ".$nm."";
        $resultID2=mysql_query($query2,$linkID);
        $countRow = mysql_fetch_object($resultID2);
        print "<td>$nm</td>";
        print "<td>$countRow->numKids</td>";
        print "</tr>";    }}

```



Name	Number of Kids
jane	3
janice	1
jenny	2
jhantara	3
jim	3
joel	0

## How did I get this?

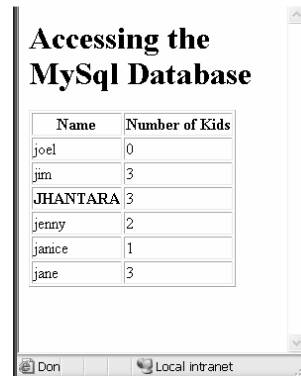


Name	Number of Kids
joel	0
jim	3
jhantara	3
jenny	2
janice	1
jane	3

## Attracting Attention

```
if ($nm == $userName) {
    print"<td><b>".strtoupper($nm)."</b></td>";
}
else print "<td>$nm</td>";

```



Name	Number of Kids
joel	0
jim	3
JHANTARA	3
jenny	2
janice	1
jane	3

## Put the values into an array

```
$query1 = "Select name from users order by name desc";
$resultID=mysql_query($query1,$linkID);
$count=0;
if ($resultID !=FALSE) {
    while ($row = mysql_fetch_object($resultID)) {
        $nm = $row->name;
        $query2 = "Select count(*) as numKids from kids where name = ".$nm."";
        $resultID2=mysql_query($query2,$linkID);
        if ($resultID2 != FALSE) {
            $countRow = mysql_fetch_object($resultID2);
            $numKids = $countRow->numKids;
        }
        else $numKids=0;
        $arrayEntry = array("num" => $numKids, "name" => $nm );
        $allResults[$count]=$arrayEntry;
        $count++;
    }
}

```



## Sort and Print

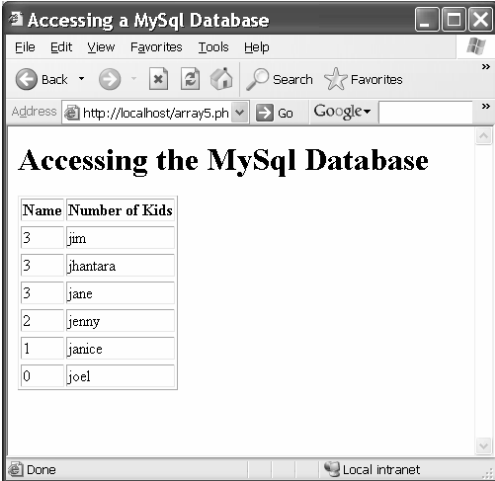
```
arsort($allResults, SORT_REGULAR);

// now print
print "<table border=1><tr><th>Name</th>";
print "<th>Number of Kids</th></tr>";

foreach ($allResults as $number => $user) {
    print "<tr>";

        print "<tr>";
        foreach ($user as $value) {
            print "<td>$value</td>";
        }
        print "</tr>";
    }
}
```

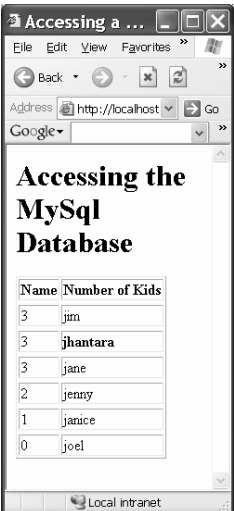
## The result



Name	Number of Kids
3	jim
3	jhantara
3	jane
2	jenny
1	janice
0	joel

## Accentuate a particular name

```
if ($value == $userName)
    print "<td><b>$value</b></td>";
else print "<td>$value</td>";
```



Name	Number of Kids
3	jim
3	<b>jhantara</b>
3	jane
2	jenny
1	janice
0	joel