

### Tutorial 3

1. Modify your twelve times table script so that the number of the times table to be printed is input via a form. Your script should use a switch statement to modify the header to say "Two Times Table", "Five Times Table" etc. Limit this to avoid a long switch statement!

```
switch (expression)
{
  case result1:
    ...
    break;
  case result2:
    ...
    break;
  default:
  }
```

*expression* is normally a variable

*result* is normally a value

Process your form by an external script, then modify it to operate with `$PHP_SELF`:

Processed by `firstformsc.php`:

```
<form action = "firstformsc.php" method = "GET">
<input type = "text" name = "num">
<br>
<input type = "submit" value = "submit ">
<br>
</form>
```

Processed by current script:

```
<form action = "<?php echo ($PHP_SELF) ?>" method = "GET">
<input type = "text" name = "num">
<br>
<input type = "submit" value = "submit">
<br>
</form>
```

You can use `isset` to test whether this is the user's first visit and output a suitable message. This must go before your form. Run:

[osiris.sund.ac.uk/cbl/mic312/downloads/timestable2.php](http://osiris.sund.ac.uk/cbl/mic312/downloads/timestable2.php)

to see the output from a solution

Of course, a switch statement is not the best way of implementing this. Modify your programme again to create the header using an array.

[osiris.sund.ac.uk/cbl/mic312/downloads/timestable3.php](http://osiris.sund.ac.uk/cbl/mic312/downloads/timestable3.php)

is an example which uses an array. Note also that the value input from the form is saved, incremented, and output with the form.

2. The Republic of Sunlandia has a tax rate of 30%. Single people have a tax allowance set against their earnings of 4000 Sunlandian dollars, so they pay tax on their annual earnings less 4000. A married man has an allowance of \$6000. For each child he is given an allowance of \$1500, so he would pay tax on his earnings less 6000 and less a further 1500 for each child.

Write a script to accept the following inputs from a form:

Income  
Marital Status  
Number of Children

The output from the script should be:

Income  
Total allowances  
Tax payable

To see an example program run:

[osiris.sund.ac.uk/cbl/mic312/downloads/tax.php](http://osiris.sund.ac.uk/cbl/mic312/downloads/tax.php)

The solutions to these exercises are as follows:

1. To display a times table from a form submission:

Form – timestables1.php  
Display – tables.php

2. To display a timestable using \$PHP\_SELF:

timestables2.php

3. To display a times table using an array for the header:

timestable3.php

4. Tax calculation:

tax.php