

### HTTP Requests

<code>\$_GET</code>	Access URL parameters.
<code>\$_POST</code>	Access POST request body content.
<code>\$_SERVER['php_self']</code>	Current php document url.

### Built-in Functions

<code>include("x.php")</code>	Includes the PHP file "x.php".
<code>echo " &lt;content &gt; "</code>	Renders <content> on the page on load
<code>die( " message " )</code>	Exits the script, with a message.
<code>isset(\$a)</code>	Returns true if \$a is not NULL
<code>isset(\$a, \$b)</code>	Returns true if \$a and \$b is not NULL
<code>print_r(\$x)</code>	Prints readable information of \$x
<code>empty(\$x)</code>	Checks if \$x is empty or false
<code>trim(\$x)</code>	Removes leading and trailing whitespaces from \$x

### PHP MS SQL DLL Functions

<code>sqlsrv_connect</code>	Connect to Microsoft SQL Server db.
<code>sqlsrv_query</code>	Prepares and executes a query.
<code>sqlsrv_free_stmt</code>	Frees resources for the statement.
<code>sqlsrv_close</code>	Closes the SQL connection.
<code>sqlsrv_fetch_array</code>	Returns a row as an array.
<code>sqlsrv_next_result</code>	Move to the next result of the statement.
<code>sqlsrv_errors</code>	Returns error and warning information.

### Example Form Loading

```
<?php
    // Get the parameter: " Fruit" from the URL
    query string.
    // Eg: https://example.php/? Fruit= -
    Apple

    $Fruit = $_GET[' Fruit'];

?>
// Render the variable $Fruit in the HTML
```

### Example Form Loading (cont)

```
> <div>
    <?php echo $Fruit; ?>
</div>

Apple
```

### Example SQL Query Insert

```
<?php
    $Name = "John Doe";
    $Age = 25;
    $db_server = " server_host_name";
    $db_username = " database_username ";
    $db_password = " database_password ";
    $db_database = " database_name ";
    $connectionInfo = array( " Database " => $db_server, " UID " => $db_username, " PWD " => $db_password );
    $conn = sqlsrv_connect( $db_server, $connectionInfo );
    $sql = " INSERT INTO dbo.Customers ( Name, Age ) VALUES ";
    // Append more string literals to the
    variable $sql to form the full query
    $sql .= " ('.$ Name.' ', '.$ Age.'') ";
    $stmt = sqlsrv_query( $conn, $sql );
    // Free statement and connection resources.
    sqlsrv_free_stmt( $stmt );
    sqlsrv_close( $conn );

?>
```

### Basic Syntax

<code>\$variable = value</code>	Creates a variable, can be of any type.
<code>" string literal "</code>	A literal string
<code>// comment</code>	Comments will not execute.
<code>" x"."y "</code>	Concatenates " x" and " y", resulting in " xy"

### Flow Control

```
if (x) {y} else if (a) {b} else {z}
```

Conditional code block, if x is true, run y. Otherwise, if a is true, run b. Otherwise, run z

```
do {x} while (y)
```

A do ... while loop. Executes x as long as y is true

```
while(x) {y}
```

A while loop. Executes y as long as x is true

### Comparison Operators

<code>!\$x</code>	Returns true if \$x is false
<code>\$x == \$y</code>	Returns true if \$x matches \$y in value
<code>\$x === \$y</code>	Returns true if \$x matches \$y in value and type
<code>\$x != \$y</code>	Returns true if \$x does not match \$y in value
<code>\$x !== \$y</code>	Returns true if \$x does not match \$y in value or type
<code>\$x &lt;&gt; \$y</code>	Same as <code>\$x != \$y</code>
<code>\$x &amp;&amp; \$y</code>	Returns true if both \$x and \$y is true
<code>\$x    \$y</code>	Returns true if either \$x or \$y is true
<code>\$x &gt; \$y</code>	Returns true if \$x is greater than \$y
<code>\$x &lt; \$y</code>	Returns true if \$x is less than \$y
<code>\$x &gt;= \$y</code>	Returns true if \$x is greater than or equal to \$y
<code>\$x &lt;= \$y</code>	Returns true if \$x is less than or equal to \$y

### Example Form Submission

```
<?php
    // Check if the request is a HTTP POST request. If it is, $_POST will not be empty.
    if ($_POST) {
        $Fruit = $_POST ['Fruit'];
        // Fruit will have the value from the input element with the property: name="fruit" upon submission.
```

### Example Form Submission (cont)

```
> }
?>
<form method="post" action="<?=$_SERVER['php_self']?>">
    <input type="text" name="fruit" id="fruit_id" />
    <input type="submit" value="Submit" />
</form>
```

### Example SQL Query Select

```
<?php
    $db_server = " <server_hostname>";
    $db_username = " <database_username>";
    $db_password = " <database_password>";
    $db_database = " <database_name> ";
    $connectionInfo = array( " Database" => $db_database, " UID" => $db_username, " PWD" => $db_password);
    $conn = sqlsrv_connect( $db_server, $connectionInfo);
    $sql = " SELECT FirstName, LastName FROM dbo.Customers";
    $stmt = sqlsrv_query( $conn, $sql);
    if( $stmt === false) {
        die( print_r( sqlsrv_errors(), true) );
    }
    while( $row = sqlsrv_fetch_array( $stmt, SQLSRV_FETCH_ASSOC) ) {
        echo $row['LastName'].", ".$row['FirstName']."<br />";
    }
    // Free statement and connection resources.
    sqlsrv_free_stmt( $stmt);
    sqlsrv_close( $conn);
?>
```

Doe, John  
Sue, Mary