

Control Structure (if-else, switch-case, loop)

if-else

Conditional - if

- Logical operators (== != < > <= >= && || !)
- Curly braces

```
<?php
    $ans = 42;
    if ( $ans == 42 ) {
        print "Hello world!\n";
    } else {
        print "Wrong answer\n";
    }
?>
```

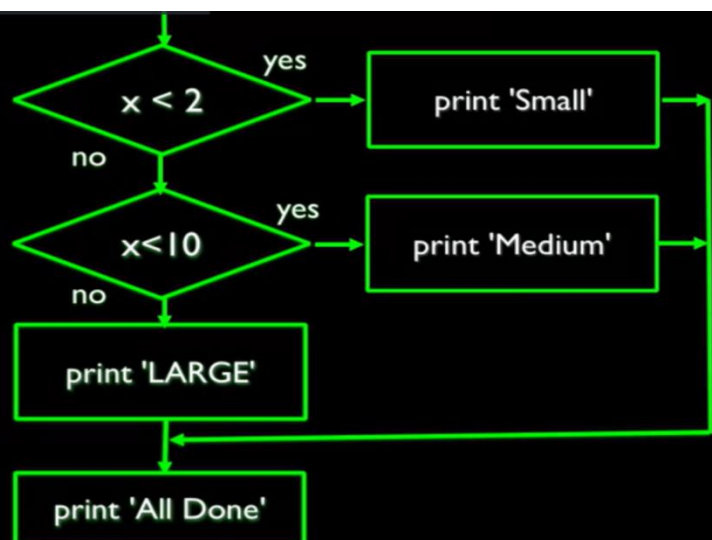
→ Hello World!

Multi-way

```
$x = 7;

if ( $x < 2 ) {
    print "Small\n";
} elseif ( $x < 10 ) {
    print "Medium\n";
} else {
    print "LARGE\n";
}

print "All done\n";
```



loop

```
$fuel = 10;
while ($fuel > 1) {
    print "Vroom vroom\n";
}
```

A **while** loop is a “zero-trip” loop with the test at the top before the first iteration starts.

We hand construct the **iteration variable** to implement a counted loop.

```
$fuel = 10;
while ($fuel > 1) {
    print "Vroom vroom\n";
    $fuel = $fuel - 1;
}
```

```
$count = 1;
do {
    echo "$count times 5 is " . $count * 5;
    echo "\n";
} while (++$count <= 5);
```

A **do-while** loop is a “one-trip” loop with the test at the bottom after the first iteration completes. ♪

```
1 times 5 is 5
2 times 5 is 10
3 times 5 is 15
4 times 5 is 20
5 times 5 is 25
```

Loop runs while TRUE (top-test)

Before loop starts

Run after each iteration.

```
for($count=1; $count<=6; $count++ ) {  
    echo "$count times 6 is " . $count * 6;  
    echo "\n";  
}
```

1 times 6 is 6
2 times 6 is 12
3 times 6 is 18
4 times 6 is 24
5 times 6 is 30
6 times 6 is 36

A **for** loop is the simplest way to construct a counted loop.

Breaking Out of a Loop

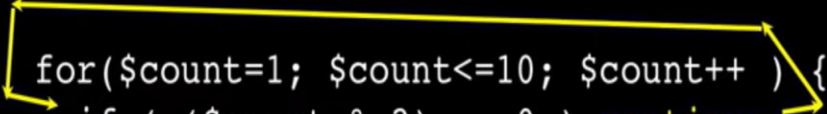
- The **break** statement ends the current loop and jumps to the statement immediately following the loop.
- It is like a loop test that can happen anywhere in the body of the loop.

```
for($count=1; $count<=600; $count++ ) {  
    if ( $count == 5 ) break;  
    echo "Count: $count\n";  
}  
echo "Done\n";
```

Count: 1
Count: 2
Count: 3
Count: 4
Done

Finishing an Iteration with **continue**

The **continue** statement ends the current iteration. jumps to the top of the loop, and starts the next iteration.



```
for($count=1; $count<=10; $count++) {  
    if ( ($count % 2) == 0 ) continue;  
    echo "Count: $count\n";  
}  
echo "Done\n";
```

```
Count: 1  
Count: 3  
Count: 5  
Count: 7  
Count: 9  
Done
```

switch_case

```
switch(num)  
{  
    case 1:  
    {  
        echo " ";  
        break;  
    }  
    case 2:  
    {  
        echo " ";  
        break;  
    }  
    default:  
    {  
        echo " ";  
    }  
}
```