



For...loop Exercises php



- 1) Print the numbers from 10 to 1 in descending order.
- 2) Print the sum of the even numbers from 1 to 50.
- 3) Print the sum of the odd numbers from 1 to 30.
- 4) Print the first 15 multiples of 3.
- 5) Print the first 20 prime numbers.
- 6) Print a right triangle made of asterisks (*), with a height of 10.
- 7) Print a diamond made of asterisks (*), with a width of 9 and a height of 9.
- 8) Print a rectangle made of asterisks (*), with a width of 10 and a height of 5, but with a hollow interior.
- 9) Print the first 25 numbers in the sequence 1, 4, 7, 10, 13, 16, ...
- 10) Print the first 12 terms in the sequence 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144.

Exercises and solution

- 1) Print the numbers from 10 to 1 in descending order.

```
for ($i = 10; $i >= 1; $i--) {  
    echo $i . " ";  
}
```

- 2) Print the sum of the even numbers from 1 to 50.

```
$sum = 0;  
for ($i = 2; $i <= 50; $i += 2) {  
    $sum += $i;  
}  
echo $sum;
```

- 3) Print the sum of the odd numbers from 1 to 30.

```
$sum = 0;  
for ($i = 1; $i <= 30; $i += 2) {  
    $sum += $i;  
}  
echo $sum;
```

- 4) Print the first 15 multiples of 3.

```
for ($i = 1; $i <= 15; $i++) {  
    echo (3 * $i) . " ";  
}
```

5) Print the first 20 prime numbers.

```
$count = 0;
for ($i = 2; $count < 20; $i++) {
    $prime = true;
    for ($j = 2; $j <= sqrt($i); $j++) {
        if ($i % $j == 0) {
            $prime = false;
            break;
        }
    }
    if ($prime) {
        echo $i . " ";
        $count++;
    }
}
```

6) Print a right triangle made of asterisks (*), with a height of 10.

```
for ($i = 1; $i <= 10; $i++) {
    for ($j = 1; $j <= $i; $j++) {
        echo "* ";
    }
    echo "\n";
}
```

7) Print a diamond made of asterisks (*), with a width of 9 and a height of 9.

```
for ($i = 1; $i <= 9; $i++) {
    for ($j = 1; $j <= abs(5 - $i) + 1; $j++) {
        echo "* ";
    }
    echo "\n";}
```

- 8) Print a rectangle made of asterisks (*), with a width of 10 and a height of 5, but with a hollow interior.

```
for ($i = 1; $i <= 5; $i++) {  
    for ($j = 1; $j <= 10; $j++) {  
        if ($i == 1 || $i == 5 || $j == 1 || $j == 10) {  
            echo "* ";  
        } else {  
            echo " ";  
        }  
    }  
    echo "\n";  
}
```

- 9) Print the first 25 numbers in the sequence 1, 4, 7, 10, 13, 16, ...

```
$num = 1;  
for ($i = 1; $i <= 25; $i++) {  
    echo $num . " ";  
    $num += 3;  
}
```

- 10) Print the first 12 terms in the sequence 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144.

```
$num1 = 1;  
$num2 = 1;  
echo $num1 . " " . $num2 . " ";  
for ($i = 3; $i <= 12; $i++) {  
    $num3 = $num1 + $num2;  
    echo $num3 . " ";  
    $num1 = $num2;  
    $num2 = $num3;  
}
```

