



C For Loop

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For Loop

When you know exactly how many times you want to loop through a block of code, use the **for** loop instead of a **while** loop:

Syntax

```
for (statement 1; statement 2; statement 3) {  
    // code block to be executed  
}
```

Statement 1 is executed (one time) before the execution of the code block.

Statement 2 defines the condition for executing the code block.

Statement 3 is executed (every time) after the code block has been executed.

The example below will print the numbers 0 to 4:

Example

```
int i;  
  
for (i = 0; i < 5; i++) {  
    printf("%d\n", i);  
}
```

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Example explained

Statement 1 sets a variable before the loop starts (int i = 0).

Statement 2 defines the condition for the loop to run (i must be less than 5). If the condition is true, the loop will start over again, if it is false, the loop will end.

Statement 3 increases a value (i++) each time the code block in the loop has been executed.

Another Example

This example will only print even values between 0 and 10:

Example

```
for (i = 0; i <= 10; i = i + 2) {  
    printf("%d\n", i);  
}
```

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C Exercises

Test Yourself With Exercises

Exercise:

Use a **for loop** to print "Yes" 5 times:

```
(int i = 0; i < 5;    ) {  
    printf("Yes\n");  
}
```

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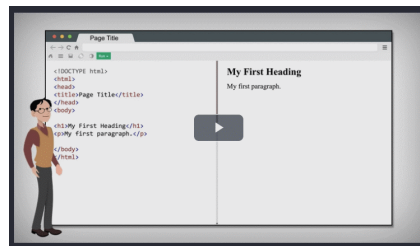
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