

CONTROL STATEMENTS: LOOPING—REPETITION

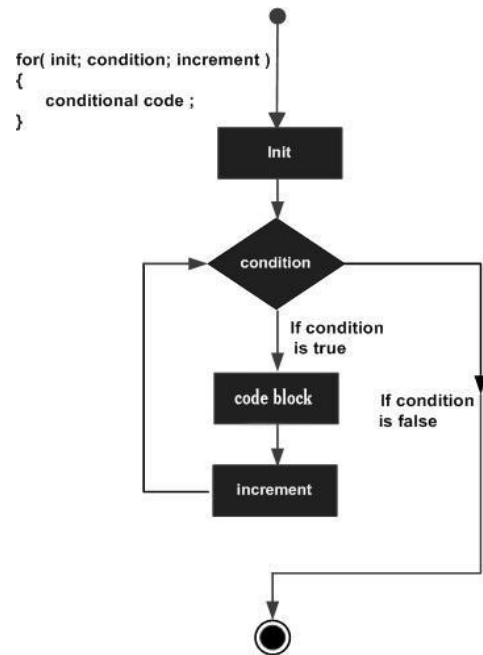
- Iteration and repetitive execution (for, while, do-while), nested loops.

The for loop

Syntax:

```
Statement1;
Statement2;
for(initialization; condition; incrementation)
{
Statement3;
Statement4;
}
Statement5;
```

Flowchart:

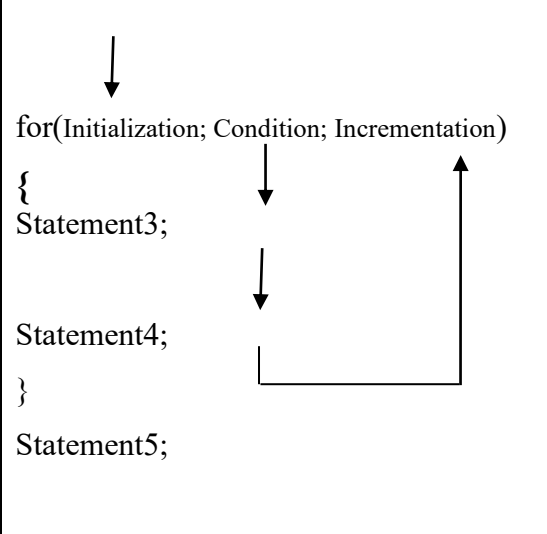


Explanation:

In case of for loop, the Initialization, Condition check and Incrementation is represented in the same line.

- ➡ First Initialization of the loop is performed.
- ➡ Next condition is checked. If condition is true then the control enters the body of the loop and statements are executed.
- ➡ Next Incrementation of the loop is performed after which again the control goes back to the condition check, if condition is true, the body is executed again.
- ➡ This process repeats as long as the condition evaluates to be true. Once the condition evaluates to be false, the control flows to the statement outside the body of the loop.

Consider the following program:

 <pre> for(Initialization; Condition; Incrementation) { Statement3; Statement4; Statement5; } </pre>	<pre> #include<stdio.h> void main() { int i; for(i=1;i<=5;i++) { printf("INDIA\n"); } printf("is our country\n"); getch(); } </pre>	<p>OUTPUT:</p> <pre> INDIA INDIA INDIA INDIA INDIA is our country </pre>
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