

MCQs on Loops in C

Question	Code Snippet	Answers	Correct Answer	Explanation
1	<pre>for (int i = 1; i <= 5; i++) { printf("%d ", i); }</pre>	a) Prints 1 to 4 b) Prints 1 to 5 c) Infinite loop d) Compile time error	b)	The loop iterates 5 times, printing i from 1 to 5.
2	<pre>int sum = 0; for (int j = 0; j < 3; j++) { sum += j; } printf("Sum: %d\n", sum);</pre>	a) Sum: 0 b) Sum: 3 c) Sum: 6 d) Compile time error	c)	The loop adds j to sum in each iteration (0 + 1 + 2).
3	<pre>int i = 10; while (i > 0) { printf("%d ", i); i--; }</pre>	a) Prints 1 to 10 b) Prints 10 to 1 c) Infinite loop d) Compile time error	b)	The loop decrements i in each iteration, printing it until i becomes 0 (inclusive).
4	<pre>for (int k = 1; k <= 4; k++) { if (k == 3) continue; printf("%d ", k); }</pre>	a) Prints 1 2 4 b) Prints 1 2 3 4 c) Prints 3 4 d) Compile time error	a)	The continue statement skips printing k when it's 3.
5	<pre>int num = 1; do { printf("%d ", num); num *= 2; } while (num <= 16);</pre>	a) Prints 1 2 4 8 b) Prints 1 2 4 8 16 c) Infinite loop d) Compile time error	b)	The do-while loop ensures at least one execution. num is doubled in each iteration.
6	<pre>for (int i = 0; i < 10; i++) { if (i % 2 == 0) break; printf("%d ", i); }</pre>	a) Prints all even numbers less than 10 b) Prints all odd numbers less than 10 c) Prints 0 d) Compile time error	b)	The loop breaks when i is even, printing only odd numbers.
7	<pre>int factorial = 1; for (int i = 1; i <= 5; i++) { factorial *= i; } printf("Factorial of 5: %d\n", factorial);</pre>	a) Factorial of 5: 24 b) Factorial of 5: 120 c) Infinite loop d) Compile time error	b)	The loop calculates the factorial of 5 (1 * 2 * 3 * 4 * 5).
8	<pre>int count = 0; while (count < 5) { printf("*"); count++; }</pre>	a) Prints * b) Prints ***** c) Infinite loop d) Compile time error	b)	The loop prints * 5 times and increments count in each iteration.
9	<pre>for (int i = 1; i <= 6; i++) { for (int j = 1; j <= i; j++) { printf("%d ", j); } printf("\n"); }</pre>	a) Prints a square b) Prints a triangle c) Compile time error d) Unexpected output	b)	The nested loop creates a right triangle pattern.