

22/11/2025

### (1) 20 MCQ's on Loops concept.

- (1) Which of the following loops guarantees to execute its body at least once?
- (a) for loop
  - (b) while loop
  - (c) do-while loop
  - (d) None of the above.

Answer: do-while loop (c).

- (2) Which of the following is an entry-controlled loop?

- (a) do-while loop
- (b) for loop
- (c) goto statement
- (d) switch statement.

Answer:- for loop (b)

- (3) What is the purpose of the break statement in a loop?

- (a) To skip the current iteration and proceed to next.
- (b) To terminate the loop and exit to the statement immediately following the loop.
- (c) To restart the loop from the beginning.
- (d) To cause a compile-time error.

Answer: (b)

- (4) What is the purpose of the continue statement in a loop?

- (a) To terminate the loop and exit to the statement immediately following the loop.
- (b) To skip the current iteration and proceed to the next iteration of the loop.
- (c) To restart the loop from the beginning.
- (d) To cause a runtime error.

Answer: (b)

(5) Which part of the for loop is optional?

(a) Initialization

(b) condition

(c) Increment/Decrement

(d) All of the above

Answer:- (d) All of the above.

(6) Consider the following code snippet.

c

```
int i = 0;
```

```
while (i < 5) {
```

```
    printf("%d", i);
```

```
    i++;
```

```
}
```

What will be the output?

(a) 0 1 2 3 4

(b) 1 2 3 4 5

(c) 0 1 2 3 4 5

(d) Infinite loop

Answer:- (a) 0 1 2 3 4

(7) How many times will the following loop execute?

c

```
int i = 0;
```

```
do {
```

```
    printf("Hello \n");
```

```
    i++;
```

```
}
```

```
while (i < 0);
```

(a) 0-times

(b) 1-times

(c) Infinite times

(d) Compile error

Answer:- 1-time.

(8) Which of the following is the correct syntax for an infinite for loop?

(a) for(;;)

(b) for(int i=0; i; i++)

(c) for(; ;)

(d) All of the above.

Answer:- (d).

- (9) What is an infinite loop?
- (a) A loop that executes a fixed number of times
  - (b) A loop that never terminates.
  - (c) A loop that executes only once.
  - (d) A loop with no condition.

Answer:- (b).

- (10) What happens if the condition in a while loop is initially false?

- (a) The loop body executes once.
- (b) The loop body never executes.
- (c) A compile-time error occurs.
- (d) An infinite loop occurs.

Answer:- (b).

- (11) What will be the output of the following code?

```
C int i = 0;
do {
    printf("%d", i);
    i++;
} while (i < 0);
```

- (a) 0
- (b) No output
- (c) Infinite loop
- (d) Compile-time error

Answer:- (a)

- (12) Which loop is most suitable when the number of iterations is known before hand?

- (a) while Loop
- (b) do-while Loop
- (c) for loop
- (d) go to loop

Answer:- (c)

- (13) What is nested looping?

- (a) A loop within a function.
- (b) A loop that calls itself recursively.
- (c) A loop inside another loop
- (d) A loop with multiple conditions.

Answers:- (c)

- (14) What is the effect of omitting the initialization part in a for loop?
- (a) compile-time error
  - (b) run-time error
  - (c) The loop will still execute if the condition and increment parts are present.
  - (d) An infinite loop.

Answer: (c)

- (15) Which of the following is true about the do-while loop?
- (a) It tests the condition at the beginning of the loop.
  - (b) It tests the condition at the end of the loop.
  - (c) It does not have a condition.
  - (d) It always executes only once.

Answer: (b)

- (16) What will be the output of the following code?

```
for (int i=0; i<=3; i++) {  
    if (i==1) {  
        continue;  
    }  
    printf("%d", i);  
}
```

- (a) 012
- (b) 02
- (c) 12
- (d) 0

Answer: (b)

- (17) Which of the following statements is NOT a control flow statement?

- (a) if-else
- (b) switch
- (c) printf
- (d) for

Answer: (c)

(18) What will be the output of the following code?

```
C for(int i=0; i<3; i++) {  
    if(i==1) {  
        break;  
    } printf("%d", i);  
}
```

- (a) 0 1 2
- (b) 0 2
- (c) 0
- (d) 1

Answer:- (c)

(19) When is a while loop preferred over a for loop?

- (a) When the number of iterations is known.
- (b) When the loops needs to execute at least once.
- (c) When the termination condition is more complex and not directly tied to a counter.
- (d) Never.

Answer:- (c)

(20) What is the correct syntax for a loop?

- (a) for (initialization, increment/decrement; condition)
- (b) for (condition; initialization; increment/decrement)
- (c) for (initialization; condition; increment/decrement)
- (d) for (loop-body; condition; initialization)

Answer:- (c).