

1. Which of the following is NOT a looping construct?

- a. for loop
- b. while loop
- c. do-while loop
- ~~d. if-else statement.~~

2. What is the primary purpose of a loop in programming?

- a. To make decisions based on conditions
- ~~b. To execute a block of code repeatedly~~
- c. To define functions
- d. To declare variables.

3. In a for loop, which part is executed only once at the beginning?

- a. Condition
- ~~b. Initialization~~
- c. Increment / decrement
- d. Loop body.

4. How many times will the following code print "Hello"?

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

- a. 0
- b. 1
- c. 2
- ~~d. 3~~

c?
5. which loop guarantees that the loop body will execute at least once?

a. for loop

b. while loop

~~c. do-while loop~~

d. all the above

6. what statement is used to terminate a loop prematurely and transfer control to the statement immediately following the loop?

a. Continue

~~b. break~~

c. return

d. exit.

7. what statement is used to skip the current iteration of a loop and proceed to the next iteration?

a. break

b. go to

~~c. Continue~~

d. exit.

8. what is the out put of the following code?

```
int i=0;
```

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

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

```
    i++;
```

```
}
```

~~a.~~ 0 1 2 3 4

b. 1 2 3 4 5

c. 0 1 2 3 4 5

d. error

9. Which of the following is an infinite loop?

a. `for (int i=0; i < 10; i++);`

~~b.~~ `while (1);`

c. `do { } while (0);`

d. `for (int i=0; i > 0; i--);`

10. In a while loop, where is the condition evaluated?

~~a.~~ Before the loop body

b. After the loop body

c. Inside the loop body

d. At the end of the program.

11. What is a nested loop?

a. Before the loop body

~~b.~~ After the loop body

c. Inside the loop body

d. At the end of the program.

12. What will be the output of the following code?

```
int i=5;
```

```
do {
```

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

```
    i --;
```

```
} while (i > 0);
```

~~a. 5 4 3 2 1~~

b. 4 3 2 1 0

c. 5 4 3 2 1 0

d. Error

13. Which of the following is true about do-while loop?

a. The condition is checked at the beginning.

~~b. The loop body is executed at least once~~

c. It is always an infinite loop

d. It cannot contain break statements.

14. What is the purpose of the goto statement in the context of loops?

a. To create a new loop

~~b. To jump to a labeled statement within the same function.~~

c. To exit the program

d. To define a function.

15. If the condition in a while loop is initially false, how many times will the loop body execute?

~~a. Zero times~~

b. one time

c. infinite times

d. Depends on the break statement.

16. Which loop is typically used when the number of iterations is known in advance?

a. while loop

b. do-while loop

~~c. for loop~~

d. if-else statement.

17. what happens if the increment/decrement part of a loop is omitted?

a. Compile-time error

b. Runtime error

c. The loop will execute only once

d. The loop might become an infinite loop if the condition never becomes false.

18. what is the output of the following code?

```
for (int i=0; i<5; i++) {
```

```
    if (i==2) {
```

```
        continue;
```

```
    }
```

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

```
}
```

a. 0 1 2 3 4

b. 0 1 3 4

c. 0 1

d. Error.

19. what is the output of the following code?

```
for (int i=0) (int i=0; i<5; i++) {
```

```
    if (i==3) {
```

```
        break;
```

```
    }
```

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

```
}
```

b. 0 1 2

c. 0 1 2 3

d. Error

20. Which of the following is a valid for loop syntax?

a. ~~for~~ (i = 0; i < 10; i++)

b. for (i = 0; i < 10; i++)

c. for (i = 0; i < 10; i++)

d. for (int i; i < 10; i++)