

Homework

Programmation in c Language

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Test 1

1. How many loops are there in C ++? List them.

- There are 3 types of loops for, do, while

When is the cycle used for?

- The cycle used for the initialization the main program.

Write syntax loop for

- **for** (declare and initialise counter; test value of counter; change value of counter)
{
 statement(s)
}

What is iteration?

- **Iteration** is the process where a set of instructions or statements is executed repeatedly for a specified number of time or until a condition is met. These statements also alter the control flow of the program and thus can also be classified as **control statements** in C Programming Language.

What is a cycle counter?

- A **program counter** is a register in a computer processor that contains the address (location) of the instruction being executed at the current time. As each instruction gets fetched, the **program counter** increases its stored value by 1.

What will the program output as a result?

- 8 1

- 9 0

7. What is the difference between cycles while and do while and a cycle for

- **A) The while loop. General form**

- The while loop is called a loop with a precondition

- **b) The general form of the cycle operator 'do ... while'**

- The 'do ... while' loop should be used in cases where the iteration should be done at least once. Unlike 'for' and 'while' loops, in the 'do ... while' loop, the condition is checked when the loop exits (and not when entering the loop). The 'do ... while' loop is also called a cycle with a postcondition.

c) In C++, the 'for' loop can have a very wide implementation and application. The 'for' loop is also called a cycle with a parameter.

8. Write syntax loop while

- The syntax of a **while** loop in C programming language is –
- `while(condition) { statement(s); }`

9. What is iteration?

- **Iteration** is the process where a set of instructions or statements is executed repeatedly for a specified number of time or until a condition is met. These statements also alter the control flow of the program and thus can also be classified as **control statements** in C Programming Language.

10. What will the program output as a result?

11. What is the difference between cycle while and do while

While loop is executed only when given condition **is true. Whereas, do-while loop is executed for** first time irrespective **of the** condition. After executing **while loop for** first time, then condition **is checked.**

Write syntax loop do while

- The syntax of a **do...while** loop in C programming language is –
- `do { statement(s); } while(condition);`

13. What will the program output as a result?

- "Hello!"
- "bye!"