

TCS NINJA EXCEPTED TEST 5

The TCS test Sampus seasons will have four sections:

- 1) Section-1 **Quantitative Test**
- 2) Section-2 **Verbal Test (Test on Written English skills)**
- 3) Section-3 **Test on Programming Language Proficiency (based on C)**
- 4) Section-4 **Coding test (C Language)**

Question 1: Use of an increment statement or decrement statement in C?

Answer:

There are actually two ways you can do this. One is to use the increment operator ++ and decrement operator --. For example, the statement x++ means to increment the value of x by 1. Likewise, the statement x-- means to decrement the value of x by 1.

Two types of increments are:

1. pre increment: (increment by 1 then print) and
2. post increment: (print then incremented value will be in buffer). Same thing will be with decrement.

Question 2: In programs we place comment symbols on some codes instead of deleting it. How does this aid in debugging?

Answer:

Placing comment symbols /* */ around a code, also referred to as commenting out, is a way of isolating some codes that you think maybe causing errors in the program, without deleting the code.

Question 3: What is the use of a '\0' character?

Answer:

This character is used primarily to show the end of a string value.

Question 4: What is the difference between the = symbol and == symbol?

Answer:

The = symbol is often used in mathematical operations. It is used to assign a value to a given variable. On the other hand, the == symbol, also known as equal to or equivalent to, is a relational operator that is used to compare two values.

Question 5: In C Programming, which of the following operators is incorrect and why? (>=, <=, <>, ==)

Answer:

<> is incorrect, all other operators are relational operators. While this operator is correctly interpreted as not equal to in writing conditional statements, it is not the proper operator to be used in C programming. Instead, the operator != must be used to indicate not equal to condition.

Question 6: Can the curly brackets { } be used to enclose a single line of code?

Answer:

While curly brackets are mainly used to group several lines of codes, it will still work without error if you used it for a single line. Some programmers prefer this method as a way of organizing codes to make it look clearer, especially in conditional statements.

Question 7: Can I use int data type to store the value 32768? Why/why not?

Answer:

No. int data type is capable of storing values from -32768 to 32767. To store 32768, you can use long int instead. You can also use unsigned int, assuming you don't intend to store negative values.

Question 8: Can two or more operators such as \n and \t be combined in a single line of program code?

Answer: Yes, it's perfectly valid to combine operators, especially if the need arises.

For example: you can have a code like `printf (\"Hello\\n\\n\\World\\n\");` to output the text 'Hello' on the first line and 'World' enclosed in single quotes to appear on the next two lines.

Question 9: When is the 'void' keyword used in a function?

Answer:

When declaring functions, you will decide whether that function would be returning a value or not. If that function will not return a value, such as when the purpose of a function is to display some outputs on the screen, then `void` is to be placed at the leftmost part of the function header. When a return value is expected after the function execution, the data type of the return value is placed instead of `void`.

Question 10: Write a loop statement that will show the following output:

```
1
12
123
1234
12345
```

Answer:

```
for (a=1; a<=5; i++) {
  for (b=1; b<=a; b++)
    printf("%d",b);
  printf("\n");
}
```