

What is C tokens?

C tokens are the basic building blocks in C language which are constructed together to write a C program. Each and every smallest individual units in a C program are known as C tokens.

C tokens are of six types. They are,

1. Keywords (eg: int, while),
2. Identifiers (eg: main, total),
3. Constants (eg: 10, 20),
4. Strings (eg: "total", "hello"),
5. Special symbols (eg: (), {}),
6. Operators (eg: +, /, -, *)

What is identifier in c?

Each program elements in a C program are given a name called identifiers. Names given to identify Variables, functions and arrays are examples for identifiers.

```
int x=10;
```

Here x is a name given to integer type variable in above statement.

What are the rules defined for naming an identifier?

The followings are the rules for naming an identifier:

- First character should be an alphabet or underscore.
- Succeeding characters might be digits or letter.
- Punctuation and special characters aren't allowed except underscore.
- Identifiers should not be keywords.

What is keyword?

Keywords are pre-defined words in a C compiler. Each keyword is meant to perform a specific function in a C program. Since keywords

are referred names for compiler, they can't be used as variable name.

E.g. int, float, if, else, while, for etc.

What is variable in c?

A variable is a name of the memory location. It is used to store data. Its value can be changed, and it can be reused many times.

It is a way to represent memory location through symbol so that it can be easily identified.

Let's see the syntax to declare a variable: type variable;

Example

```
int a=10,b=20;//declaring 2 variable of integer type a and b with  
initial value 10 & 20 respectively
```

What is constant in c?

A constant is a value or variable that can't be changed in the program, for example: 10, 20, 'a', 3.4, "c programming" etc.

There are different types of constants in C programming.

List of Constants in C

Constant	Example
Decimal Constant	10, 20, 450 etc.
Real or Floating-point Constant	10.3, 20.2, 450.6 etc.
Octal Constant	021, 033, 046 etc.
Hexadecimal Constant	0x2a, 0x7b, 0xaa etc.
Character Constant	'a', 'b', 'x' etc.
String Constant	"c", "c program", "c in javatpoint" etc.

What are the differences between variable and constant in c?

CONSTANTS	VARIABLE
A value that can not be altered throughout the program	A storage location paired with an associated symbolic name which has a value
It is similar to a variable but it cannot be modified by the program once defined	A storage area holds data
Can not be changed	Can be changed according to the need of the programmer
Value is fixed	Value is varying