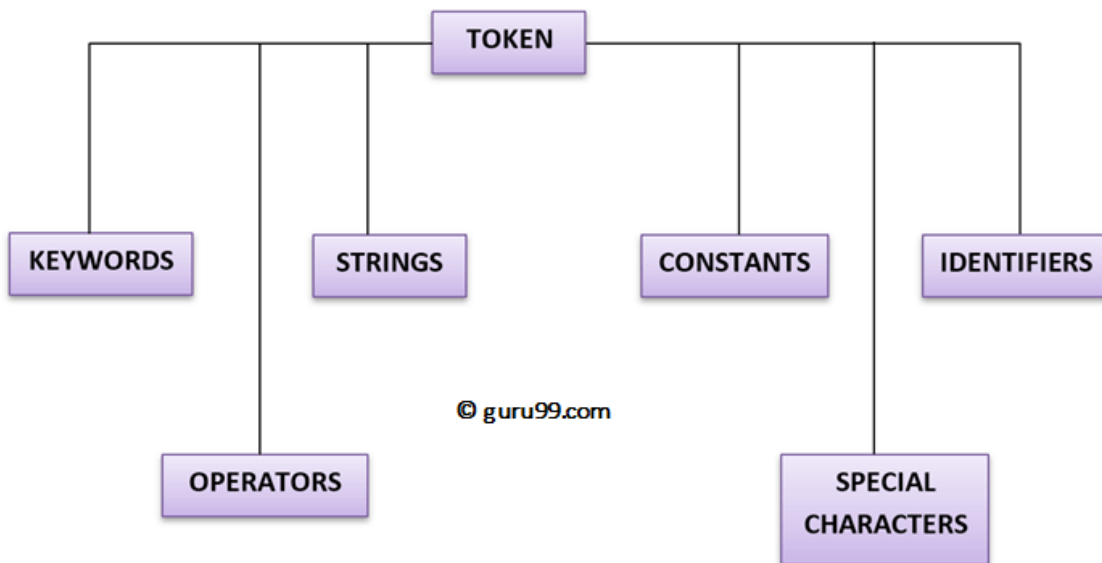


What is Token in C?

TOKEN is the smallest unit in a 'C' program, which are meaningful to the compiler. The compiler breaks a program into the smallest possible units (tokens) and proceeds to the various stages of the compilation.

A token is divided into six different types, viz, Keywords, Operators, Strings, Constants, Special Characters, and Identifiers.



Keywords and Identifiers

In 'C' every word can be either a keyword or an identifier.

Keywords have fixed meanings, and the meaning cannot be changed. They act as a building block of a 'C' program. There are a total of 32 keywords in 'C'. Keywords are written in lowercase letters.

Following table represents the keywords in 'C'-

auto	double	int	struct
break	else	long	switch
case	enum	register	typedef
char	extern	return	union
const	short	float	unsigned
continue	for	signed	void
default	goto	sizeof	volatile
do	if	static	while

Identifier

An identifier is nothing but a name assigned to an element in a program. Example, name of a variable, function, arrays etc. Each identifier must have a unique name. Following rules must be followed for identifiers:

1. The first character must always be an alphabet or an underscore.
2. It should be formed using only letters, numbers, or underscore.
3. A keyword cannot be used as an identifier.
4. It should not contain any whitespace character.
5. The name must be meaningful.

Summary

- A token is the smallest unit in a program.
- A keyword is reserved words by language.

- There are total of 32 keywords.
- An identifier is used to identify elements of a program.

Constants in C

Constants refer to fixed values that the program may not alter during its execution. These fixed values are also called **literals**.

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

Define Constant:

```
const type constant_name;
```

```
const float PI=3.14;
```