

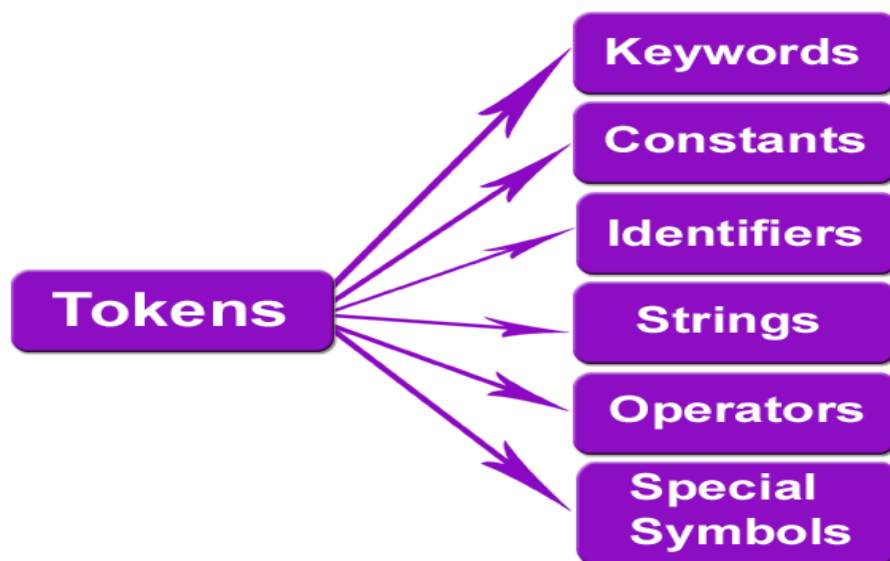
4. Tokens, Keywords, Identifier

In the previous chapter we have learnt about basic concept of C Data Types, compilation and execution process of c etc. In this chapter we are going to learn about the **Tokens, Keywords and Identifier**.

Tokens

Tokens are small unit in C programming which are used together to construct the C program, they are of following types:

- Keyword
- Identifier
- Constant
- String
- Operator
- Specified Symbol



C tokens example program

```
#include<stdio.h>
int main()
{
    int v1, v2, sum;
    v1 = 100, v2 = 200;
    sum = v1 + v2;
```

4. Tokens, Keywords, Identifier

```
printf ("Sum of V1 and v2 is = %d \n", sum);  
}
```

Here

main -> Identifier

{},() -> Delimiters

v1, v2 -> Variables

100, 200 -> Constant

main, print, {}, (), v1, v2 are the Tokens

Keywords

Keywords are the reserved words in C used for some specific purpose. According to ANSI (American National Standards Institute) there are 32 keyword in C which are mentioned below:

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

4. Tokens, Keywords, Identifier

Note : As discussed all keywords are the reserved word. So, We can't use keywords as a variable in Programming. By mistake if will use as a variable then C compiler will generate a compile time error.

Identifier:

Keywords are predefined words that cannot be changed or altered by users while the identifiers are user defined words that are used to give names to entities like variables, arrays, functions, structure etc.

There are certain rules which need to be followed while naming identifiers

- Name should consists of only alphabets, letters, digits and underscore.
- First letter of identifier must be alphabet or underscore.
- Special characters or keywords or symbols are not allowed.
- C is case sensitive, hence uppercase and lowercase letters are considered different.

Some examples of valid identifiers:

Name, marks, net_pay etc

Some examples of invalid identifiers:

10name- first letter must be alphabet.

Float- It is a keyword, hence not valid.

Marks# – # is a special character hence not valid.