Basic Structure Of A C Program

All C Programs must follow a basic structure. A C program starts with a main function and executes instructions present inside it.

Each instruction is terminated with a semicolon (;).

There are some rules which are applicable to all the C programs:

1. Every program's execution starts from main() function.
2. All the statements are terminated with a semicolon (;).
3. Instructions are case-sensitive.
4. Instructions are executed in the same order in which they are written.

Comments //

// This is a Comment. We write comments by using double slash sign(//). Comments are to notify other programmers the working of the code at specific intervals or we write them for our-self. They do not

have any effect on the program. They do not appear on output screen. They are only for understanding what the code is about.

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Basic Syntax of a C Prgram

A C Program is made up of different Tokens combined together. These Tokens include

1. Keywords
2. Constants
3. Identifiers
4. Symbols
5. String Literal

A four-line code to understand tokens properly :

```
int a;
printf("Enter number a\n");
scanf("%d", &a)
return 0;
```

Keywords

Keywords are reserved words that can not be used elsewhere in the program for naming a Variable or Function, instead they have specific function or tasks and they are solely used for that. In the above code, the return statement in the last line is a keyword.

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Pre-Stored Keyword in C language are total of 32 as:

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

Identifiers

Identifiers are names given to Variables or functions in order to differentiate them from one another. They are solely based on our choice but there are few rules that we have to follow while naming identifiers.

According to the rules the name can not contain special symbols such as @, -, *, <, etc. In the above given code the "a" integer is an Identifier.

Note : C is a case-sensitive language so an Identifier containing a Capital Letter and other one containing a Small Letter at the same place will be different. For example the three words: Code, code and cOde can be used as three different identifiers.

Constant

Constant are very similar to variable and their values can be of any data type. The only difference between Constant and Variable is that a constant's value never changes.
In the given code the "0" in the last line is a Constant.

String Literal

String Literal or String Constant is a line of characters enclosed by double quotes(" "). In the given code "Enter number a" is a String Literal.

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Symbol

Symbols are special characters reserved to perform certain actions. They are used to notify the compiler so they can perform specific tasks on the given data. In the given code $ is being used as a symbol.