

HISTORY OF C LANGUAGE

C programming language was developed in 1972 by Dennis Ritchie at bell laboratories of AT&T (American Telephone & Telegraph), located in the U.S.A.

Dennis Ritchie is known as the founder of the c language.

Initially, C language was developed to be used in UNIX operating system. It inherits many features of previous languages such as B and BCPL.

Let's see the programming languages that were developed before C language.

Language	Year	Developed By
Algol	1960	International Group
BCPL	1967	Martin Richard
B	1970	Ken Thompson
Traditional C	1972	Dennis Ritchie
K & R C	1978	Kernighan & Dennis Ritchie
ANSI C	1989	ANSI Committee
ANSI/ISO C	1990	ISO Committee

C99	1999	Standardization Committee
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Structure of c language:-

Header file

main function(int/float main())

{ //start curly

Statement 1;

Statement 2;

...

Statement 3;

} //end curly

Header file:- In C language, header files contain the set of predefined standard library functions. The “#include” preprocessing directive is used to include the header files with “.h” extension in the program.

Here is the table that displays some of the header files in C language,

Sr.No.	Header Files & Description
1	stdio.h Input/Output functions
2	conio.h Console Input/Output functions

3	stdlib.h General utility functions
4	math.h Mathematics functions
5	string.h String functions
6	ctype.h Character handling functions
7	time.h Date and time functions
8	float.h Limits of float types
9	limits.h Size of basic types
10	wctype.h Functions to determine the type contained in wide character data.

Full form of

= HASH/PREPROCESSOR/OCTOTYPE

Stdio = Standard input/output

Conio = Console input/output

Example 1:-

```
#include<stdio.h>
#include<conio.h>
void main()
{
...
...
}
```

printf:- In C programming, printf() is one of the main output function. The function sends formatted output to the screen.

Example 2:-

```
#include<stdio.h>
#include<conio.h>
int main()
{
    // Displays the string inside quotations
    printf("Hello sir.");
    getch();
}
```

Output:- Hello sir.

Example 3:-

```
#include<stdio.h>

#include<conio.h>

int main()
{
    // Displays the string inside quotations
    printf("Hello sir.");
    printf("Hello would.");
    getch();
}
```

Output:- Hello sir.Hello would.

Note:-

If we want to space between (Hello sir. Or Hello would.) then we give space before Hello would.

Example 4:-

```
#include<stdio.h>

#include<conio.h>

int main()
{
    // Displays the string inside quotations
    printf("Hello sir.");
```

```
        printf(" Hello would.");  
    getch();  
}
```

Output:- Hello sir. Hello would.

If we want to space between (Hello sir. Or Hello would.). Then we use **\n** [(before hello would.) or (after hello sir.)].

Example 5:-

```
#include<stdio.h>  
#include<conio.h>  
void main()  
{  
    // Displays the string inside quotations  
    printf("Hello sir.");  
        printf(" \nHello would.");  
    getch();  
}
```

OR

```
#include<stdio.h>  
#include<conio.h>  
void main()  
{
```

```
// Displays the string inside quotations
printf("Hello sir.\n");

printf("Hello would.");

getch();

}
```

Output:- Hello sir.
Hello would.

Variable and constant:-

X=1

Where

x is a variable.

1 is a constant.

- | | |
|-----------------------------|----------|
| 1. integer[0-9] | int %d |
| 2. floating[0-9].[0-9] | float %d |
| 3. character[a-z][a-z][0-9] | char %c |

Example 6:- write a program for two value sum.

Solution:-

```
#include<stdio.h>

#include<conio.h>

int main()

{ int a,b,c;
```

```
a=10;
b=20;
c=a+b;

printf("%d",c);

getch();
}
```

Output:- 30

OR

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int a,b,c;
    a=10;
    b=20;
    c=a+b;

    printf("sum is %d",c);
    getch();
}
```

Output:- sum is 30

Scanf:-

Example 7:- Write a program to put dynamic any two number and find a sum.

Solution:-

```
#include<stdio.h>

#include<conio.h>

int main()

{ int a,b,c;

printf("Enter two number  ");

scanf("%d%d",&a,&b);

c=a+b;


printf("sum is=%d",c);

return 0;

getch();

}
```

Output:- Enter two number 5
6
Sum is 11