

BACK SLASH / ESCAPE SEQUENCE CHARACTERS

They started with back slash [\].

They used to format the outputs.

They participated in program execution but not displayed in output. Hence they are also called **escape sequence characters**.

Each back slash character=**1 byte i.e. one character**.

BACK SLASH CHARACTER	DESCRIPTION
\a	Alert [beep sound]
\b	Back space
\n	New line character
\t	Tab space
\r	Carriage return[beginning of line]
\f	Form feed ♀
\v	Vertical tab ♂
\0	Null char
\\	\ [invalid]
\k	k [invalid]

C – TOKENS

The smallest individual words we are using in developing a c program are called tokens of c language. They are of different types.

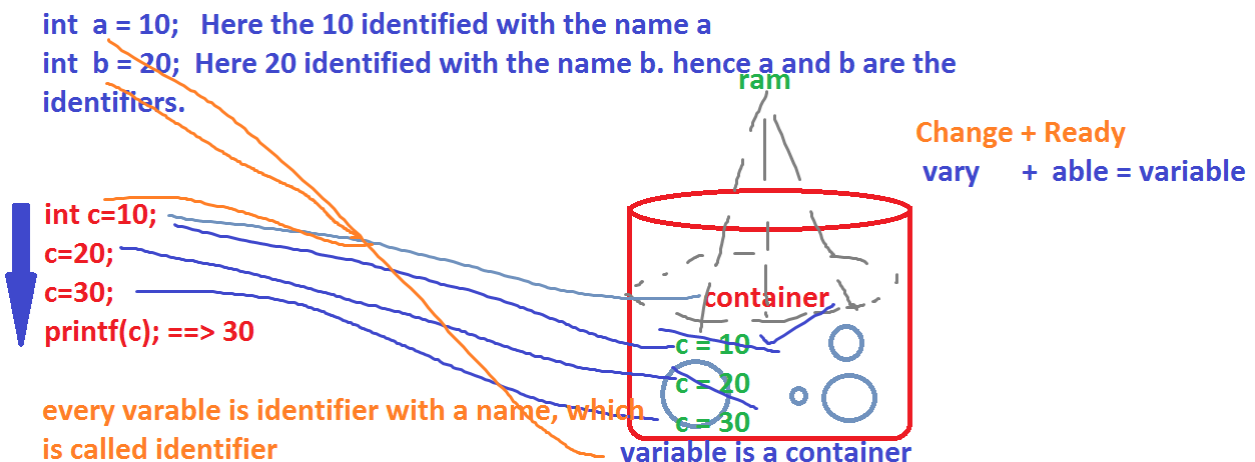
1. **Keywords:** The system predefined / reserved words are called keywords. Each keyword is having a certain meaning and as a user we can't change this meaning. C comes with 32 keywords.

Eg: auto, break, char, continue, const, case, do, double, default, else, enum, extern, for, float, goto, int, long, while, switch, union, typedef, register,.....

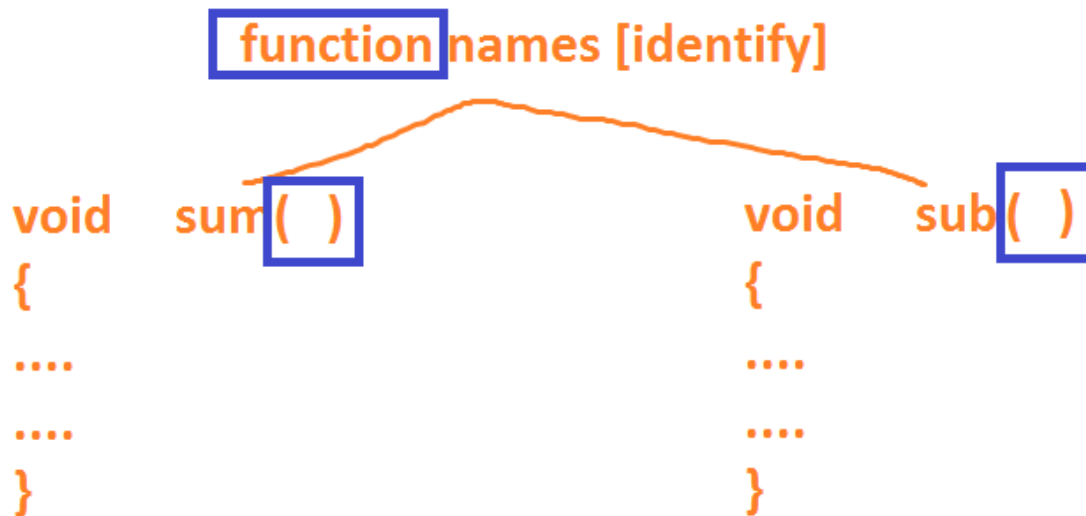
2. **Identifiers:** Names of variables, functions, files, array, pointer etc.

Example for variables:

a=10, b=20;



Example for functions:



Example for files:

a.c, b.cpp, c.java,..

Example for array:

Int a[10]; ← array variable name

Example for pointer:

Int * a; ← pointer variable name

Naming conventions [rules]:

1. Name should have to start with alphabet or underscore only.

The screenshot shows a C compiler window with a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a status bar (Line 2, Col 1, Insert, Indent, Tab, Fill, Unindent, * E:11AM.C). The code in the editor is:

```
#include<stdio.h>
void main()
{
int n;
}
```

A "Compiling" dialog box is displayed in the center, showing the following information:

Main file: 11AM.C
Compiling: EDITOR → 11AM.C

	Total	File
Lines compiled:	217	217
Warnings:	0	0
Errors:	0	0

Available memory: 249K

The screenshot shows the same C compiler window, but the code in the editor is now:

```
#include<stdio.h>
void main()
{
int 9n;
}
```

The "Compiling" dialog box shows the following information:

Main file: 11AM.C
Compiling: EDITOR → 11AM.C

	Total	File
Lines compiled:	216	216
Warnings:	0	0
Errors:	1	1

Available memory: 249K

2. Numbers allowed but not at first position.

The screenshot shows a Windows desktop with a yellow taskbar. A window titled "You are screen sharing" is active, displaying a C program in a blue editor. The editor has a menu bar with "File", "Edit", "Run", "Compile", "Project", "Options", "Debug", and "Break/watch". The code in the editor is as follows:

```
Line 4 Col 7 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
void main()
{
int n9;
}
```

A "Compiling" dialog box is open in the foreground, showing the compilation details:

Main file: 11AM.C
Compiling: EDITOR → 11AM.C

	Total	File
Lines compiled:	217	217
Warnings:	0	0
Errors:	0	0

Available memory: 249K

The Windows taskbar at the bottom shows various icons, including the Start button, task view, and several application icons. The system clock in the bottom right corner shows 12:24 PM on 17-Jul-25.

3. No special char except underscore [_]

The screenshot shows the same Windows desktop environment as the previous one. The C program in the editor has been modified to use an underscore in the variable name:

```
Line 5 Col 5 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
void main()
{
int _n9;
}
```

The "Compiling" dialog box shows the same successful compilation results as before:

Main file: 11AM.C
Compiling: EDITOR → 11AM.C

	Total	File
Lines compiled:	217	217
Warnings:	0	0
Errors:	0	0

Available memory: 249K

The Windows taskbar and system clock remain the same, with the clock now showing 12:25 PM on 17-Jul-25.

The screenshot shows a C compiler window with a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a toolbar. The main window is titled "Edit" and shows the source code for "E:11AM.C". The code is as follows:

```
Line 5      Col 12  Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
void main()
{
int _n_9_ ;
}
```

A "Compiling" dialog box is open in the foreground, displaying the following information:

Main file: 11AM.C
Compiling: EDITOR → 11AM.C

	Total	File
Lines compiled:	217	217
Warnings:	0	0
Errors:	0	0

Available memory: 249K

The Windows taskbar at the bottom shows the time as 12:26 PM on 17-Jul-25.

The screenshot shows the same C compiler window as above, but with a different source code for "E:11AM.C". The code is as follows:

```
Line 5      Col 11  Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
void main()
{
int  a$b$c ;
}
```

A "Compiling" dialog box is open in the foreground, displaying the following information:

Main file: 11AM.C
Compiling: EDITOR → 11AM.C

	Total	File
Lines compiled:	216	216
Warnings:	0	0
Errors:	3	3

Available memory: 249K

The Windows taskbar at the bottom shows the time as 12:26 PM on 17-Jul-25.

4. Spaces are not allowed.

The screenshot shows a C compiler window with a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a status bar (Line 5, Col 9, Insert, Indent, Tab, Fill, Unindent, * E:11AM.C). The code in the editor is:

```
#include<stdio.h>
void main()
{
int abc ;
}
```

A "Compiling" dialog box is displayed in the center, showing the following output:

```
Main file: 11AM.C
Compiling: EDITOR → 11AM.C
```

	Total	File
Lines compiled:	217	217
Warnings:	0	0
Errors:	0	0

Available memory: 249K

The screenshot shows the same C compiler window, but the code in the editor is:

```
#include<stdio.h>
void main()
{
int a b c ;
}
```

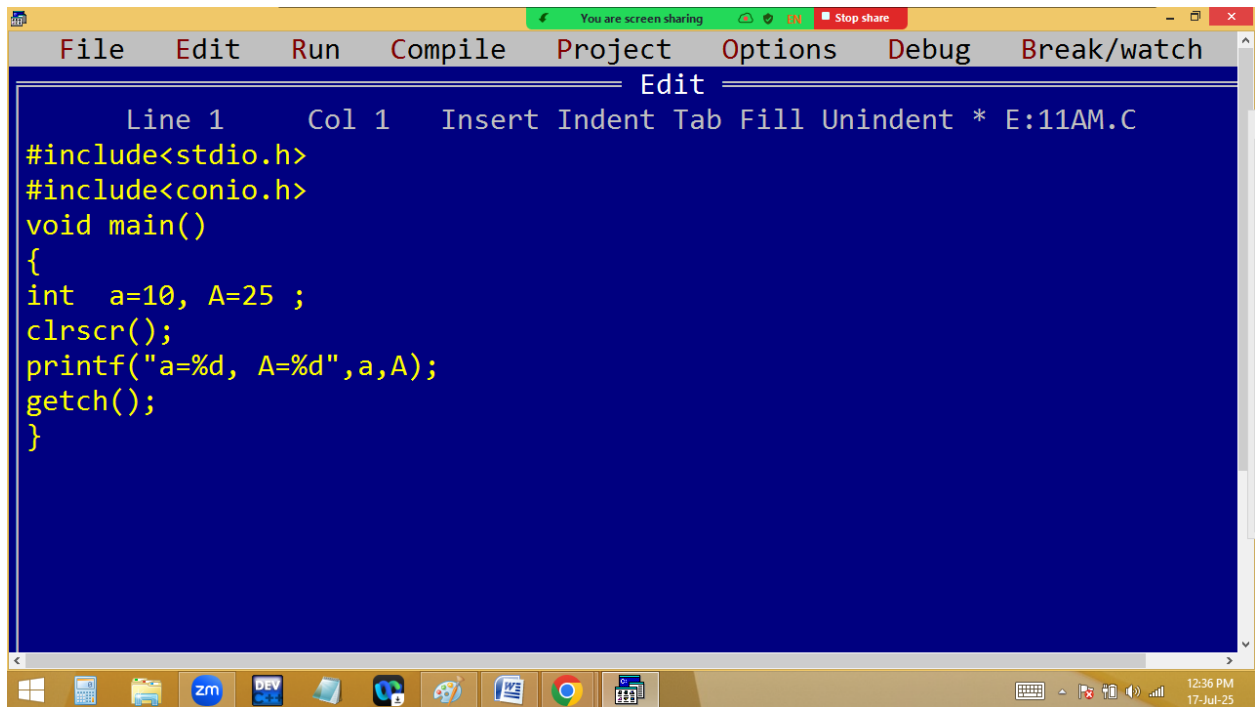
A "Compiling" dialog box is displayed in the center, showing the following output:

```
Main file: 11AM.C
Compiling: EDITOR → 11AM.C
```

	Total	File
Lines compiled:	216	216
Warnings:	0	0
Errors:	1	1

Available memory: 249K

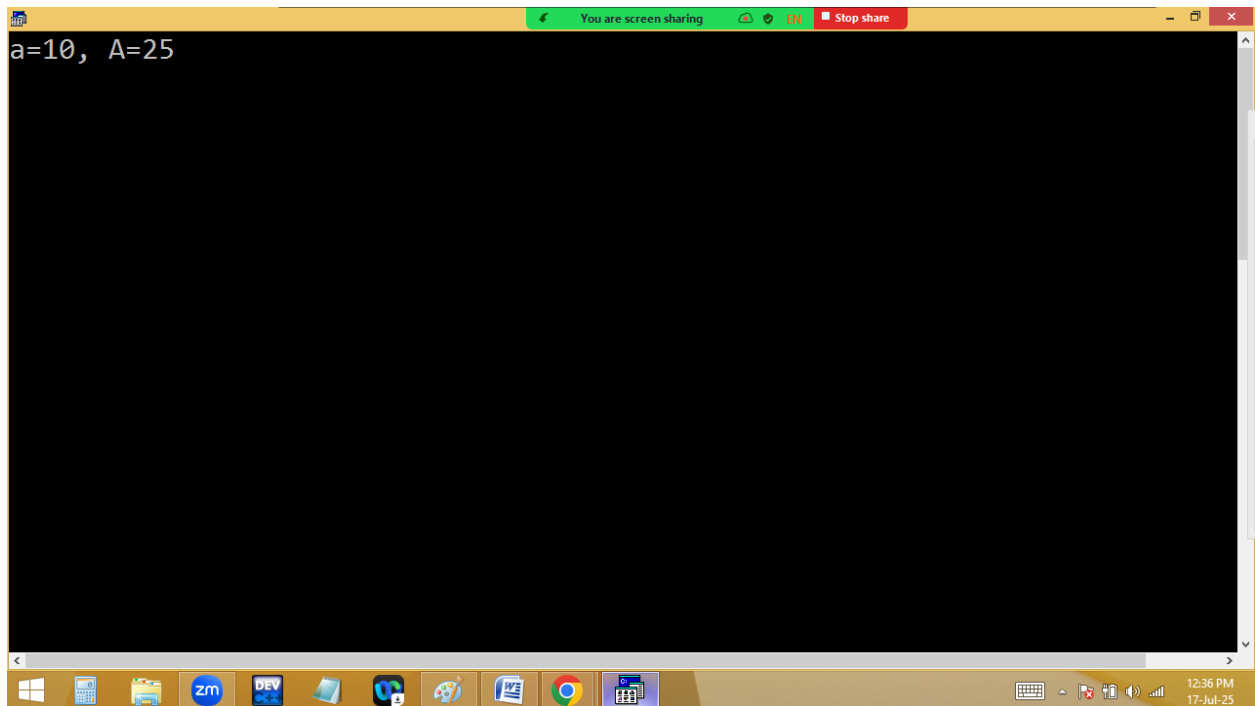
5. Identifiers are case sensitive i.e. lower and upper are different.



The screenshot shows a code editor window with a yellow title bar and a menu bar containing 'File', 'Edit', 'Run', 'Compile', 'Project', 'Options', 'Debug', and 'Break/watch'. The editor area has a blue background and displays the following C code:

```
Line 1      Col 1      Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
  int  a=10, A=25 ;
  clrscr();
  printf("a=%d, A=%d",a,A);
  getch();
}
```

The Windows taskbar at the bottom shows various icons including a calculator, a folder, a terminal, and a web browser. The system clock in the bottom right corner indicates 12:36 PM on 17-Jul-25.



The screenshot shows the same code editor window after the program has been executed. The code is no longer visible, and the editor area is black. The text 'a=10, A=25' is displayed in the top left corner of the editor area, representing the output of the program. The Windows taskbar and system clock remain the same as in the previous screenshot.

6. Duplicate Identifiers are not allowed in same function or block { }

You are screen sharing Stop share

File Edit Run Compile Project Options Debug Break/watch

Edit

Error: Redeclaration of 'a' in function main

```
#include<stdio.h>
#include<conio.h>
void main()
{
int a=123; /* variable declaration */
float a=2.5; /* declaration */
clrscr();
printf("a=%d",a);
getch();
}
```

12:49 PM 17-Jul-25

You are screen sharing Stop share

File Edit Run Compile Project Options Debug Break/watch

Edit

Error: Redeclaration of 'a' in function main

```
#include<stdio.h>
#include<conio.h>
void main()
{
int a; /* variable declaration */
int a=25; /* declaration */
int a=40; /* declaration */
a=10;
clrscr();
printf("a=%d",a);
getch();
}
```

12:41 PM 17-Jul-25

```
File Edit
Line 1 Col 13 Insert Indent Tab Fill Unindent * E:11AM.C
#include<stdio.h>
#include<conio.h>
void neighbour()
{
    int kishore=10;
    printf("%d",kishore);
}
void main()
{
    int kishore=1234; /* variable declaration */
    clrscr();
    printf("%d\n",kishore);
    neighbour();
    getch();
}
```

```
File Edit
Line 1 Col 13 Insert Indent Tab Fill Unindent * E:11AM.C
1234
10_
```