Variables

1. Variable Declaration

Usually variables are declared before use either at the start of a block of code after the opening {} and before any other statement or outside a function.

```
int a,b; /* global variables */
main()
{
float a; /* local variables */
}
```

Local variables can only accessed within that function only whereas Global variables can access in Whole program.

2. Variable Types

There are many built in data types in C.

short int -128 to 127 (1 byte)

unsigned short int 0 to 255 (1 byte)

char 0 to 255 or -128 to +127 (1 byte)

unsigned char 0 to 255 (1 byte)

signed char -128 to 127 (1 byte)

int -32,768 to +32,767 (2 bytes)

unsigned int 0 to +65,535 (2 bytes)

long int -2,147,483,648 to +2,147,483,647 (4 bytes)

unsigned long int 0 to 4,294,967,295 (4 bytes)

float single precision floating point (4 byte)

double double precision floating point (8 byte)

3. Variable Names

We can use any combination of letters and numbers for variable and function names but it must start with a letter.

We can use Underscore _ as a letter in variable name and can begin with an underscore but identifiers beginning with an underscore are reserved.And identifiers beginning with an underscore followed by a lower case letter are reserved for file scope identifiers.Therefore using underscore as starting letter is not wanted.

Hello and **hello** are different identifiers because upper and lower case letters are treated as different identifiers.