

* data types

* Expression

legal & illegal C++ expⁿ

55 + 16 → legal C++ expⁿ

55 + "John" → illegal C++ expⁿ

* Numeric data types:

Integer (whole no) such as -7, 42

Floating point no such as 3.14, -42.67

* Strings & characters:

A string is composed of no characters @ symbol
string literals are placed in double quotation marks; some
example are "Hello" 'my name is david' and similar
characters are single letter @ symbol & must be
enclosed w/in single quoted like "a" "b" etc

* Boolean: The boolean data type return just two possible
values: true (1) & false (0)

* Integer: use the int keyword to define the integer data
type.

ex: int a = 42;

Signed: A signed integer can hold both -ve & +ve no

Unsigned: A unsigned integer can hold only +ve no

short: half of the default size

long: twice of the default size

Ext unsigned long int a;

* Floating point no : It can hold real no such as
45.0, -3.23 etc.

Float, double & long double are 3 different floating
point data types

A float is 4 bytes, a double a ~~float~~ & long double
can equivalent to a double (8 byte) & 16 byte

ex double temp = 4.21;

* String : It is an ordered sequence of characters enclosed
in double quotation marks. you need to include the
<string> library to use the string data type

ex :- #include <string>

using namespace std;

int main() {

String a = "I am learning C++";

return 0;

}

* Character : A char variable holds 1-byte integer that as
integer. The value of a char variable is typically
interpreted as an ASCII character & if it enclosed in
single quote (such as 'a', 'b' etc)

* Character : A char variable holds 1-byte integer. char is a
integer. The value of a char variable is typically interpreted