

## Numeric Data Types for C and C++

Type	Keyword	# bits	# Bytes	Range	Sample App.
Unsigned character	unsigned char	8	1	0 to 255	Small numbers, days in month, person age
Character	char	8	1	-128 to 128	Small signed numbers
Enum	enum	16	2	-32,768 to 32,767	Ordered sets of values
Short integer	short	16	2	-32,768 to 32,767	Counters , small numbers
Unsigned integer	unsigned int	16	2	0 to 65,535	Large numbers, loops
Integer	int	16	2	-32,768 to 32,767	Counters , small numbers
Long integer	long int	32	4	-2,147,483,648 to 2,147,483,648	Large numbers, populations
Unsigned long int	unsigned long	32	4	0 to 4,294,967,295	Astronomical distances
Float	float	32	4	3.37E-38 to 3.37E38	Scientific (7 Digit precision)
Double	double	64	8	1.7E-308 to 1.7E308	Scientific ( 15 Digit precision)
Long double	long double	80	10	3.4E-4932 to 3.4E4932	Financial ( 19 Digit precision )
Pointer near	near pointer	16	2	N/A	Short memory locations within 64K
Pointer far	far pointer	32	4	N/A	Memory locations greater than 64K

## String Data Types for C++

Types	Keyword	Size in bytes	Include files	Functions
String object	string	Maximum 1,073,741,820 Class size N/A	#include <string>	Size, length, max_size, capacity, empty, append, replace...
Char	char	1	none	none