

C++ Primitive Data Types

<i>Name</i>	<i>Size (bytes)</i>	<i>Range of values</i>
Boolean		
bool		true or false
Integer		
int	>= 2	-32,768 to 32,767
unsigned int	>= 2	0 to 65,535
long	>= 4	-2,147,483,647 to 2,147,483,647
unsigned long	>= 4	0 to 4,294,967,295
long long	>= 8	$-(2^{63})$ to $(2^{63}) - 1$
unsigned long long	>= 8	0 to $(2^{64}) - 1$
Floating point		
float	>= 4	+/- 3.4e +/- 38 (~7 digits)
double	>= 8	+/- 1.7e +/- 308 (~15 digits)
Character		
char	>= 1	any ASCII character
<p>Note: single characters use single quotes, e.g., char c = 'A';</p> <p>Only strings (which aren't primitives anyway) use double quotes, e.g., string s = "I love CS 142!";</p>		
No data type		
void		no possible values