

What is your name? Ben Haines  
 What is your quest? To seek the holy grail.  
 What is your favorite color? Blue.

### Size of C++ data types

C++ Type	Size in bytes?	Max value? (base 10)	Zero is stored as (in hex)?	One (or 1.0) is stored as (in hex)?
int	4	2,147,483,647	0x00000000	0x00000001
unsigned int	4	4,294,967,296	0x00000000	0x00000001
float	4	3.40282e+38	0x00000000	0x3f800000
double	8	1.79769e+308	0x0000000000000000	0x3ff0000000000000
char	1	127	Char '0' = 0x30	Char '1' = 0x31
bool	1	1	false = 0x00	true = 0x01
C++ Type	Size in bytes?	Max value? (base 10)	NULL is stored as?	
int*	8	1.79769e+308	0x0000000000000000	
char*	8	1.79769e+308	0x0000000000000000	
double*	8	1.79769e+308	0x0000000000000000	

### Primitive Arrays in C++

How does the compiler determine the address of `&(IntArray2D[i][j])`?

$\&(\text{IntArray2D}[i][j]) = \&\text{IntArray2D} + (i * 6 * \text{sizeof}(\text{int})) + (j * \text{sizeof}(\text{int}))$