

What is your name? Derek Johnson dej3tc
 What is your quest? To be the very best
 What is your favorite color? Orange

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	4294967295	0x00000000	0x00000001
float	4	3.40282 * 10 ³⁸	0x00000000	0x3f800000
double	8	1.79769 * 10 ³⁰⁸	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 16 (hexadecimal))	NULL is stored as?	
int*	8	0xffffffffffffff	0x0000000000000000	
char*	8	0xffffffffffffff	0x0000000000000000	
double*	8	0xffffffffffffff	0x0000000000000000	

Primitive Arrays in C++

How does the compiler determine the address of `&(IntArray2D[i][j])`? Assume the array is defined as: `int IntArray2D[6][5];`

The address of the origin is generated behind the scenes and from there it is easy to determine the address of the other values in the array.

It is equal to:

StartingAddress + (j*(sizeof(datatype)) + (i*(sizeof(datatype)*(numberOfColumns))
