

// Justin Choi (jc8mc) 16/02/2017 inlab4.pdf

What is your name? Justin Choi

What is your quest? Between a quiz and a test

What is your favorite color? Navy 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	$(2^{31}) - 1 = 2,147,483,647$	0x0	0x1
unsigned int	4	$(2^{32}) - 1 = 4,294,967,295$	0x0	0x1
float	4	3.40282×10^{38}	0x0	0x3f800000
double	8	1.79769×10^{308}	0x0	0x3ff0000000000000
char	1	127	Char '0' = 0x30	Char '1' = 0x31
bool	1	true or 1	false = 0x0	true = 0x1
C++ Type	Size in bytes?	Max value? (base 16 (hexadecimal))	NULL is stored as?	
int*	4	0xffffffff	0x0	
char*	4	0xffffffff	0x0	
double*	4	0xffffffff	0x0	

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];`

$\&(\text{IntArray2D}[i][j]) = \&(\text{IntArray}[0][0]) + 4j + 20i$
