

What is your name? Wright Kim wdk7bj

What is your quest? Lab 4 In-lab

What is your favorite color? N/A

### Size of C++ data types 64 bit

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	2147483647	0x00000000	0x00000001
unsigned int	4	4294967295	0x00000000	0x00000001
float	4	3.4*e38	0x00000000	0x3f800000
double	8	1.7*e308	0x4030000000000000	0x4030000000000000
char	1	127	Char '0' = 0x30	Char '1' = 0x31
bool	1	True (1)	false = 0x00	true = 0x01
C++ Type	Size in bytes?	Max value? (base 10)	NULL is stored as?	
int*	8	2 <sup>64</sup> - 1	0x0000000000000000	
char*	8	2 <sup>64</sup> - 1	0x0000000000000000	
double*	8	2 <sup>64</sup> - 1	0x0000000000000000	

### Primitive Arrays in C++

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

→ Initial address + (5i + j) \* 4