CS 2150 In-lab 4 worksheet

Pat Wongwiset nw9ca@virginia.edu 09/19/17 inlab4.doc What is your quest? (?) Red

## 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	2147483647	0x00000000	0x00000001
unsigned int	4	4294967295	0x00000000	0x00000001
float	4	3.40282e+38	0x00000000	0x3f800000
double	8	1.79769e+308	0x00000000	0x00000000
char	1	127	Char '0'= 0x00000030	Char'1'= 0x00000031
bool	1	1	false = 0x00003000	true = 0x00003101
C++ Type	Size in bytes?	Max value? (base 16 (hexadecimal))	NULL is stored as?	
int*	8	Oxffffffff	0x00000000	
char*	8	0xfffffff	0x00000000	
double*	8	0xfffffff	0x00000000	

## **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];

(base address) + 4\*[i]\* (the number of column, in this case is 5) + [j]\*4