CS 2150 In-lab 4 worksheet

What is your name? Pyung Lee What is your quest? To Pass the Class What is your favorite color? Maroon

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	3.40282347E+38	0x00000000	0x3f800000
double	8	1.7976931348623157E+308	0x00000000000000000	0x00000000000000000
char	1	255	Char '0'= 0x30	Char '1'=0x01
bool	1	1	false = 0x00	true = 0x01
C++ Type	Size in bytes?	Max value? (base 16 (hexadecimal))	NULL is stored as?	
int*	8	0xFFFFFFFFFFFFFF	0x00000000000000000	
char*	8	0xFFFFFFFFFFFFFFF	0x00000000000000000	
double*	8	0xFFFFFFFFFFFFFF	0x00000000000000000	

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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];

Find the memory address of the first array IntArray2D[0][0] then add the product of the data type's byte size and the product of the column number of the desired object and the amount of total columns added with the row number of the desired object.

= Base Address *4((i*5)+j).