What is your name? Colin Harfst
What is your quest? To find the Holy Grail
What is your favorite color? Green

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	4,294,967,295	0x00000000	0x00000001
float	4	$2^{128}=3.4*10^{38}$	0x000000000	0x3f800000
double	8	$2^{1024}=1.8*10^{308}$	0x0000000000000000	0x3ff0000000000000
char	1	127	Char '0'=0x00	Char '1'= 0x01
bool	1	127	false = 0x00	true = 0x01
C++ Type	Size in bytes?	Max value? (base 10)	NULL is stored as?	
int*	8	$2^{1024}=1.8*10^{308}$	0x0000000000000000	
char*	8	$2^{1024}=1.8*10^{308}$	0x0000000000000000	
double*	8	$2^{1024}=1.8*10^{308}$	0x0000000000000000	

Primitive Arrays in C++

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

First a memory address is reserved for IntArray2D[0][0], then we have that &(IntArray2D[i][j])=&(IntArray2d[i][j-1])+sizeof(int) and &IntArray2D[i][0]=&(IntArray2D[i-1][4])+sizeof(int) where 4 is the maximum index of j. Thinking of the array as a table it assigns 4 bytes of memory for each cell in the table and when you get to the end of the row, the next spot in memory is the first entry in the next row of the table.