CS 2150 In-lab 4 worksheet

What is your name? Yujian Li What is your quest? I do not know What is your favorite color? Blue

Size of C++ data types

C++ Type	Size in	Max value?	Zero is stored	One (or 1.0) is stored
•	bytes?	(base 10)	as (in hex)?	as (in hex)?
int	4	2,147,483,647	0x00000000	0x00000001
unsigned int	4	4,294,967,295	0x00000000	0x00000001
float	4	3.40282e+38	0x00000000	0x3f800000
double	8	1.79769e+308	0x000000000 000000	0x3ff0000000000000
char	1	127	Char '0'= 0x30	Char '1'= 0x31
bool	1	1	false = 0x00	true = 0x01
C++ Type	Size in	Max value?	NULL is	
V 1	bytes?	(base 10)	stored as?	
int*	8	184467440737095	0x0000000000	
		52000	000000	
char*	8	184467440737095	0x0000000000	
		52000	000000	
double*	8	184467440737095	0x0000000000	
		52000	000000	

Primitive Arrays in C++

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

Because int has a size of 4 bit, everytime it array element increase by 1, the address increase by 4 so the formula should be &(IntArray2D[0][0])+20i+4j
