

g++ ave.cpp -o ave (1)

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g++ -c ave.cpp (2)?

⇓  
ave.o

g++ ave.o -o ave (3)

⇓  
Executable ave

\$ ./ave (4)

\$ ave → Will this work

cd → changing directories

cd .. → goes to the parent folder

cd / → root directory.

cd . → remains in the current directory

cd ~ → home directory of the current user

./ ave → executable  
↓

look for this file in the current directory

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Hint: Environment Variables

\$ env

# Pointers & Memory

char c = 'A';

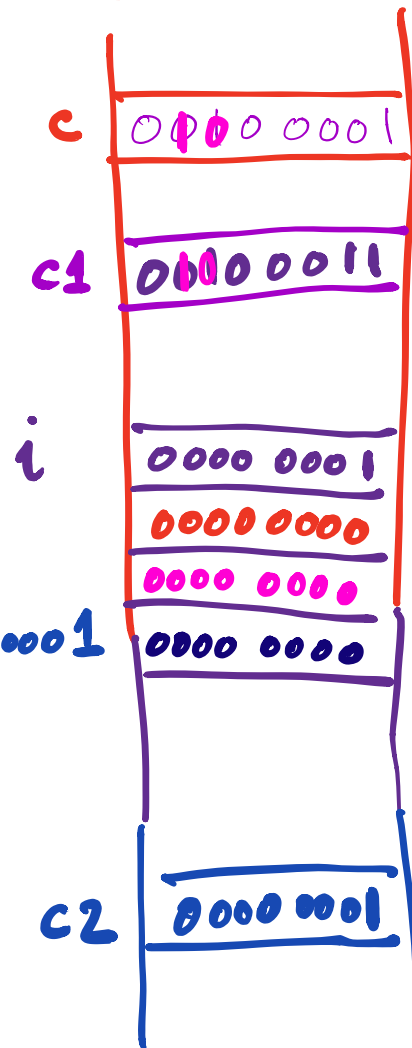
char c1 = 'C';

int i = 1;



0000 0000 0000 0000 0000 0000 0000 0001

char c2 = 1;



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If n bits, how many distinct values can you store?  $2^n$

# C++ operators.

+, -, /, \*, %

logical and &&  
or ||  
neg !

check for equality ==  
in equality !=

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Binary operator (bitwise)	~	not
	&	and
		or
	^	

char c = '4';

char c2 = 1;

char c3 = c & c2;

c 

0	0	1	0	0	0	0	1
---	---	---	---	---	---	---	---

c2 

0	0	0	0	0	0	0	1
---	---	---	---	---	---	---	---

c3 

0	0	0	0	0	0	0	1
---	---	---	---	---	---	---	---

Truth table

A	B	AND	OR
0	0	0	0
0	1	0	1
1	0	0	1
1	1	1	1

00100001

 Right shift >>

00010000

left shift. <<

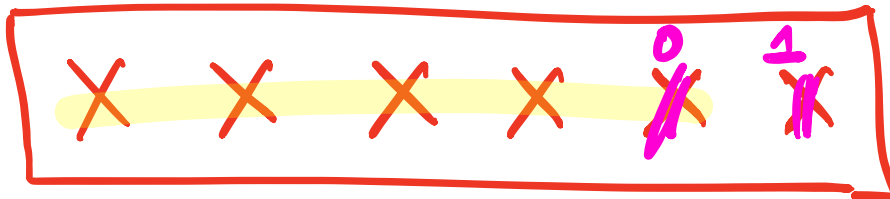
01000010

left shift  
multiply by 2

01  
← 10  
← 100

right shift  
divide by 2

Data



Mask 1: 000001 & Data → 1

Mask 2: 00010 & Data → 0

000100 & Data → ?

001000 & Data → ?

010000 & Data → ?

100000 & Data → ?