

- Int a,  $\rightarrow$  this is only a symbolic reference

$a = 50;$

Int \*pointer;

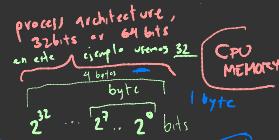
pointer = 8a;

C = \*pointer;

address of a

now pointer has the memory address of a

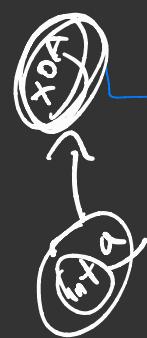
C has now the value of a



0xA0	(5 (0b100, in binary))	a int
0xA1		
0xA2		
0xA3	XAO (in binary)	
0xA4		
0xA5		
0xA6		

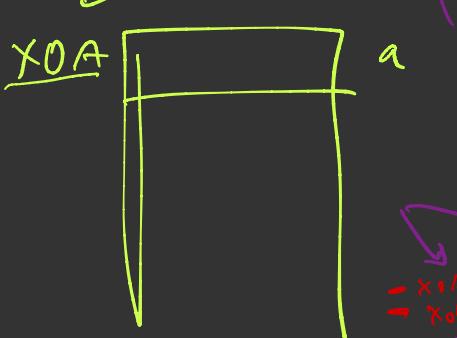
pointer  
they are usually a lot larger than int type, like 8 at least, or 32 bits

\*\*\*\*\* \* \* \* \* \* \* \* \* nbr



symbolic link  
to a place in  
memory

$$ptr-a = 0xA$$



$$\delta a =$$



0	1	2	3	4	5	6	7	8	9
1x1	1x0	1x2	1x3	1x4	1x5	1x6	1x7	1x8	1x9
8 nbr									
1x0	1x1	1x2	1x3	1x4	1x5	1x6	1x7	1x8	1x9
8 nbr									
1x0	1x1	1x2	1x3	1x4	1x5	1x6	1x7	1x8	1x9
8 nbr									
1x0	1x1	1x2	1x3	1x4	1x5	1x6	1x7	1x8	1x9
8 nbr									
1x0	1x1	1x2	1x3	1x4	1x5	1x6	1x7	1x8	1x9
8 nbr									

$$9 * nbr = 88 * nbr$$

$$8 * nbr = 87 * nbr$$

$$7 * nbr = 86 * nbr$$

$$\vdots$$

$$* nbr = 8n nbr$$

$$nbr = 42$$

```
char strcpy[]; → 0  
char destination[]; → 0  
char * source; → 0 → Immutability  
source = "oh";
```

exit

src = "this isn't cool";

src = "this is dangerous";

destination[6];

strcpy(~); will fix as many as  
it possibly can even  
if it means overwriting  
from ↪ the source / O ↪ to destination

src is bigger  
than des

src is equal  
than des

src  $\rightarrow$  [hole]

des  $\rightarrow$  [3]

src  $\rightarrow$  [hole]

des  $\rightarrow$  [4]

src is smaller  
than des

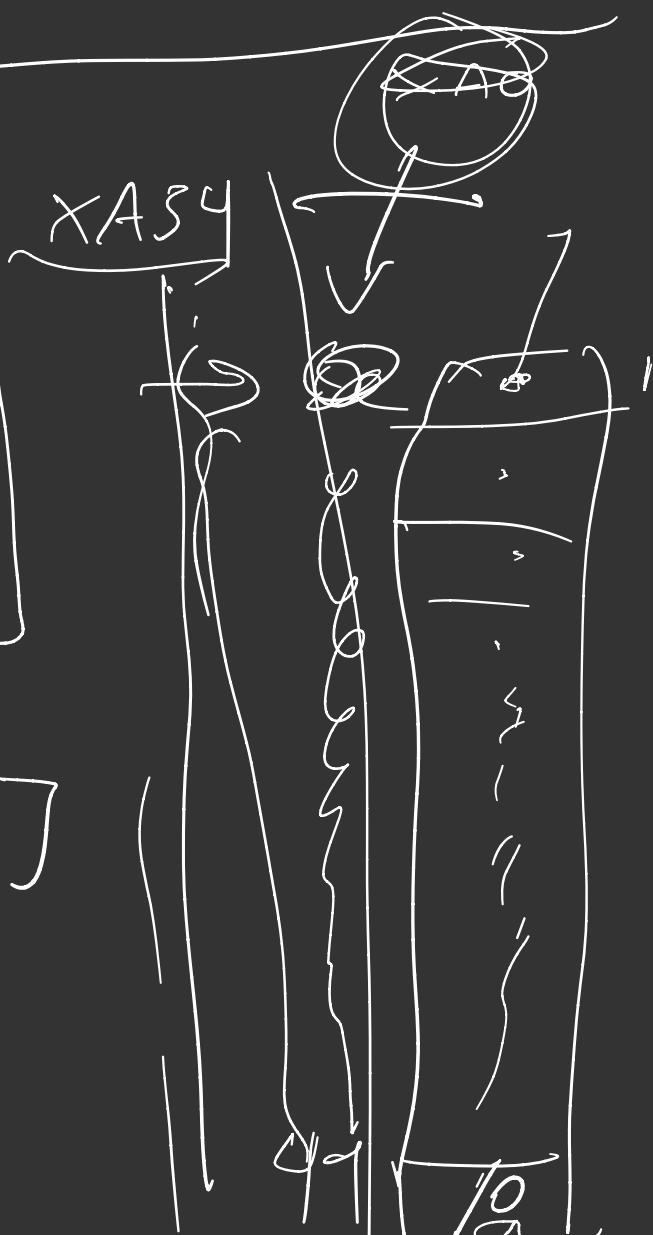
src  $\rightarrow$  [hole]

des  $\rightarrow$  [6] or {5}

(3)

des = [hole]

0 1 2 3  
~~XASS~~ + N

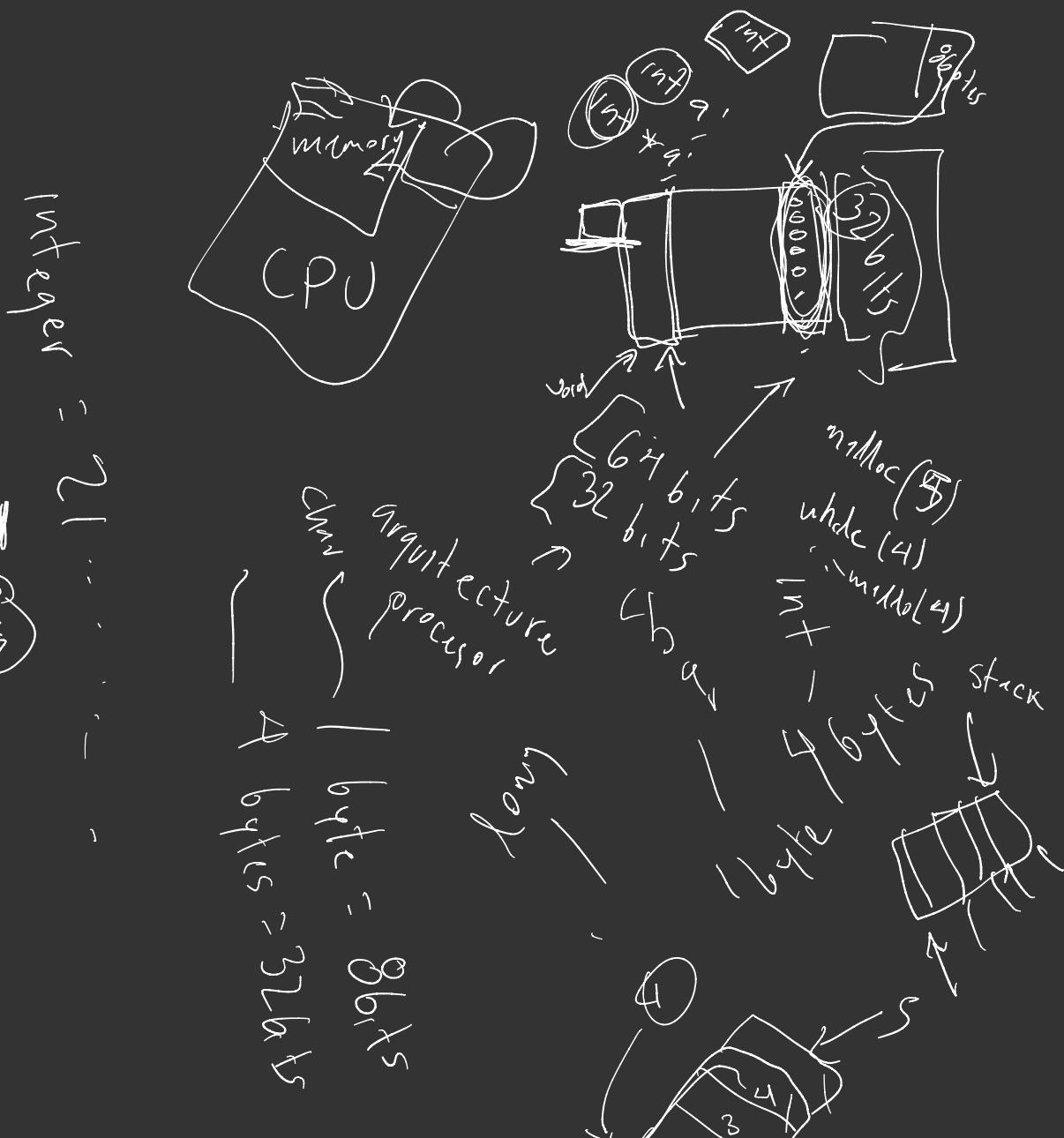


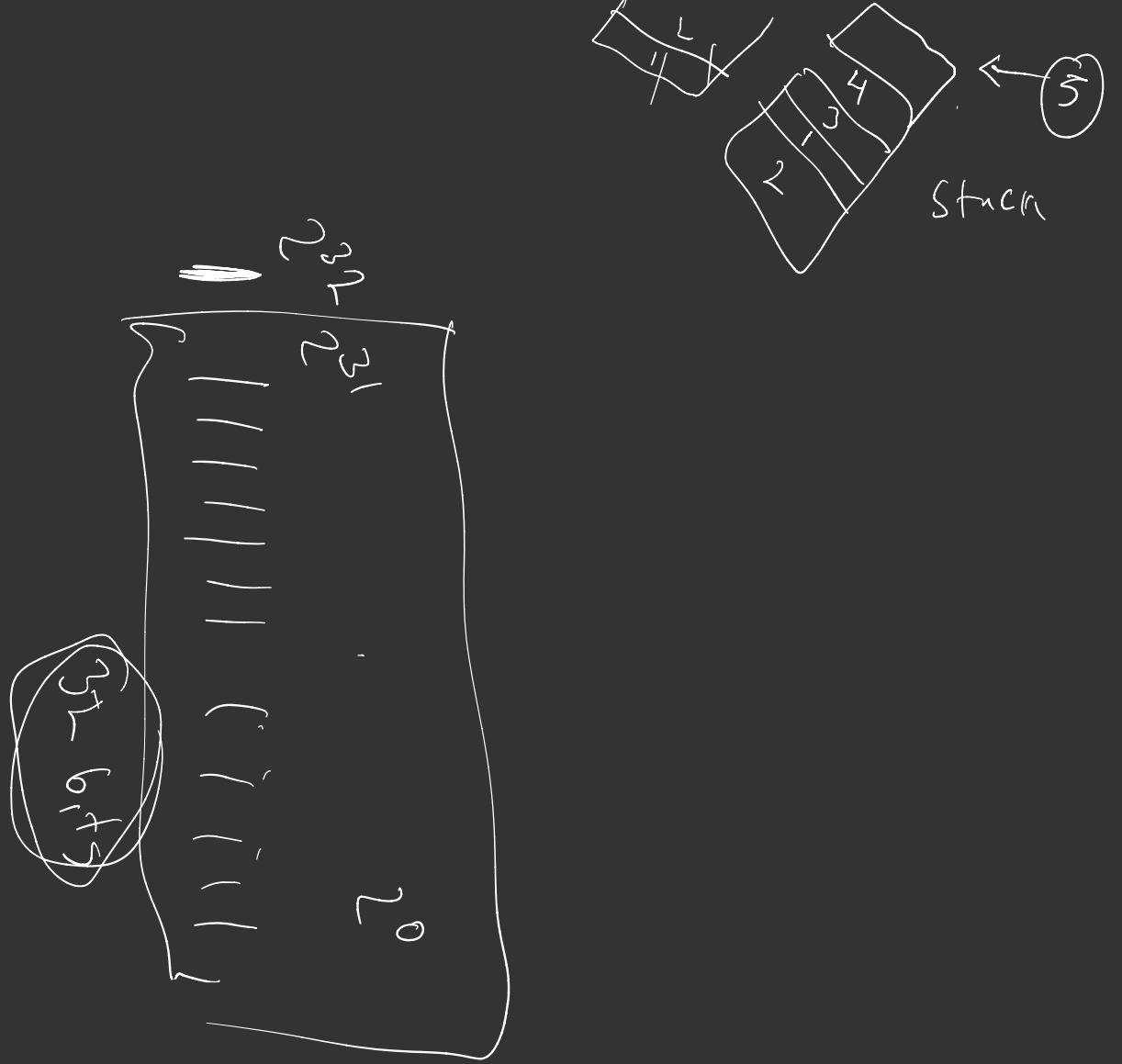
XAB

If ( 48 < \*str < 57 )

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if ( 48 <= *str 88 *str (=57) )
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( t ( '0' <= \*str, ff \$str <= '9' )





$5 * 5 * 5$

( $5^3$ )

$5$

$\begin{bmatrix} 5 \\ 5 \end{bmatrix}$

$$5^0 = 1$$

$$= \text{base} (\exp(5, 0)) = 1$$

$$= \underbrace{\text{base}}_{\text{base}} (\exp(\cancel{5}, 1)) = 5$$

$$= \frac{\text{base}}{\exp} (\cancel{5}, 2) = 25$$

$$= \frac{\text{base}}{\exp} (\cancel{5}, 3) = 125$$

$$= \underbrace{\text{base}}_{\text{base}} (\exp(\cancel{5}, 4)) = 625$$

$$5^5 = \overbrace{5 * 5 * 5 * 5 * 5}^{\text{if } (\exp ! = 0)}$$

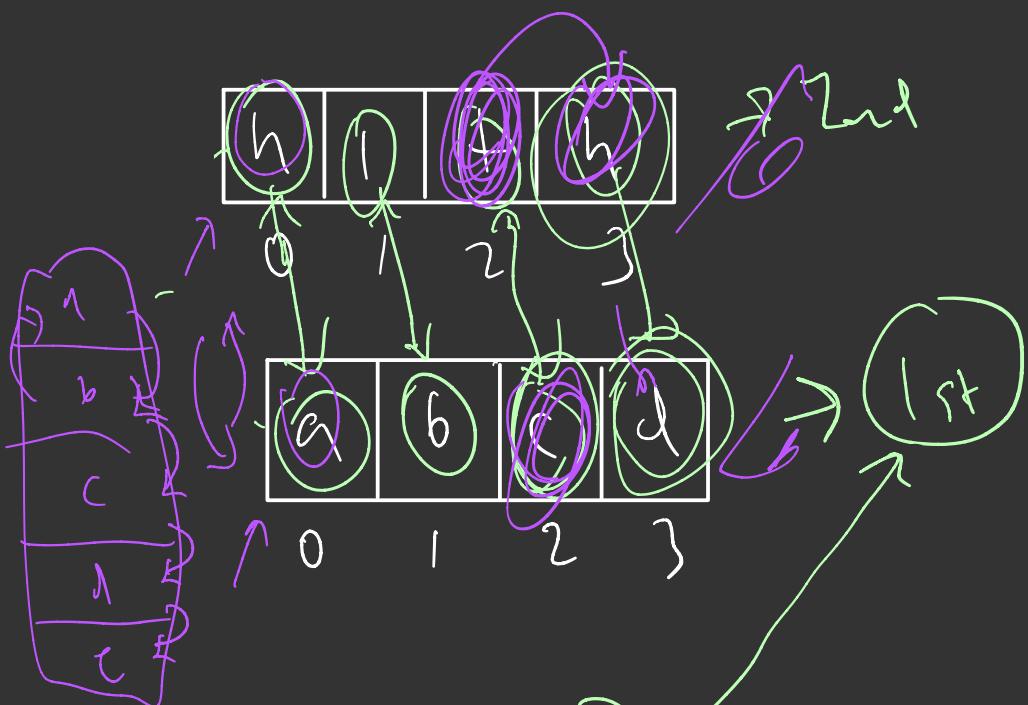
$$\begin{array}{r} 125 \\ \times 5 \\ \hline 625 \end{array}$$

if ( $\exp ! = 0$ )  
return  $(\text{base} * \exp(\text{base}, n - 1))$ ,

else

return 1





$$97 - 104 = -7$$

// compare letter by letter until  
 difference  
 // if not difference, jump to the  
 next word  
 // difference, if negative, str1 is  
 first, if positive, str2 is  
 first  
 // create a copy of args  
 // swap position



1 byte

$$\rightarrow^{\min} \rightarrow^{\max}$$