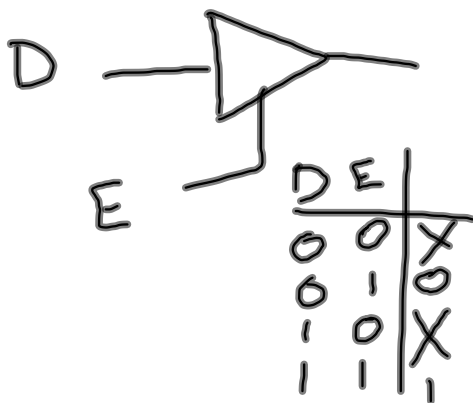
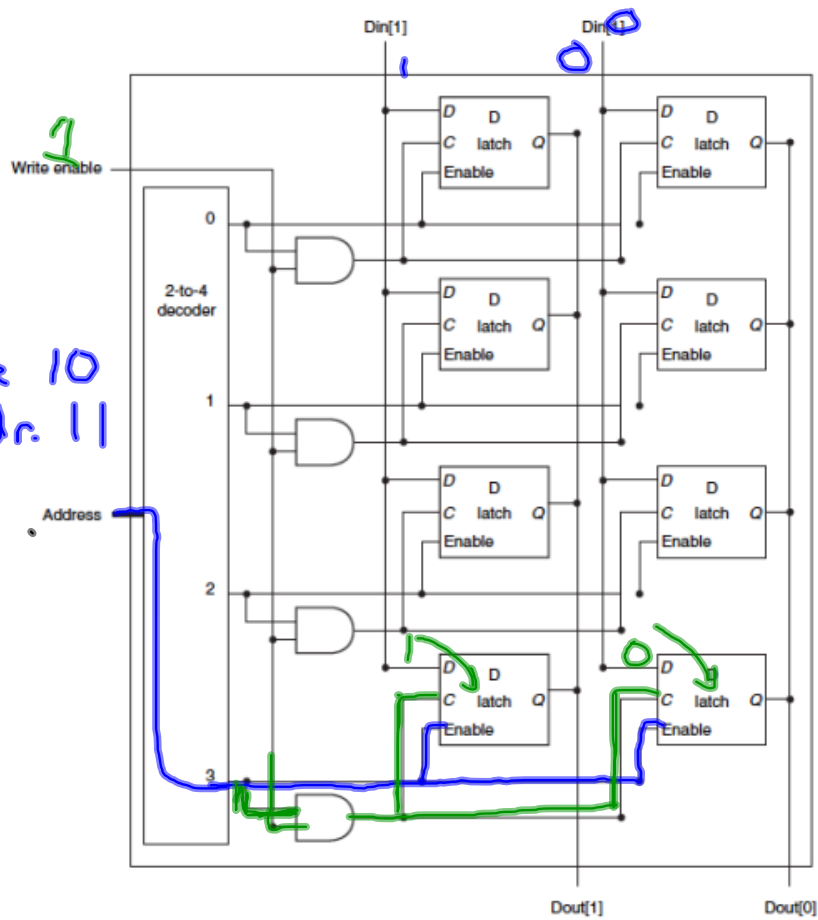


Bus - wires (one value)

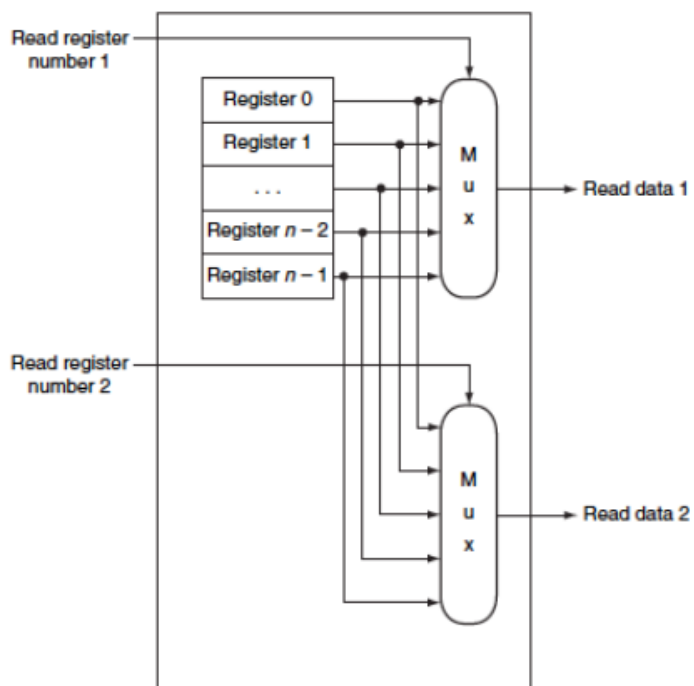


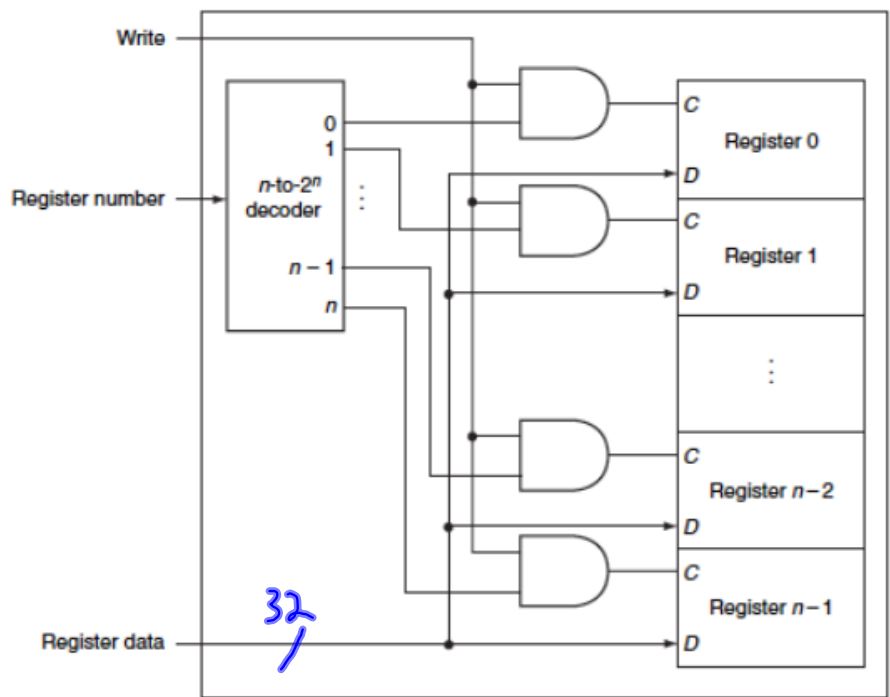
tri-state
buffer

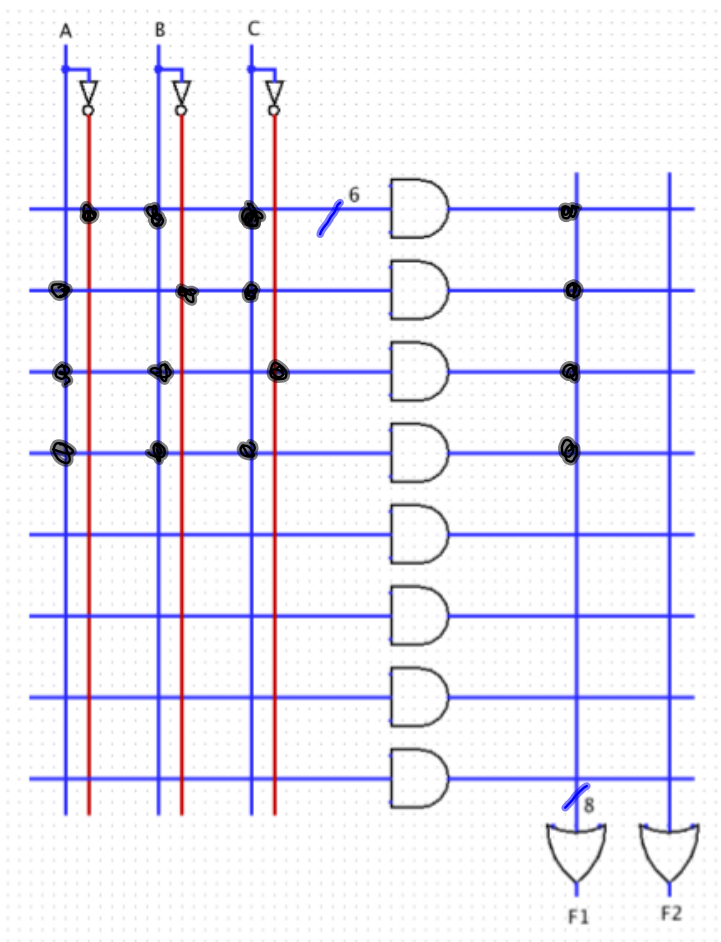
store 10
at addr. 11



2 x 4
Memory





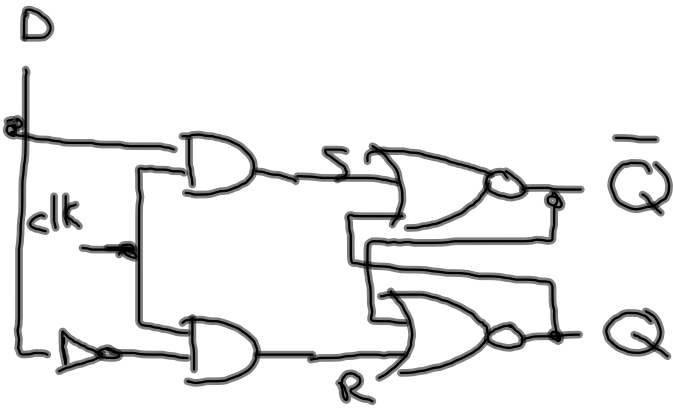


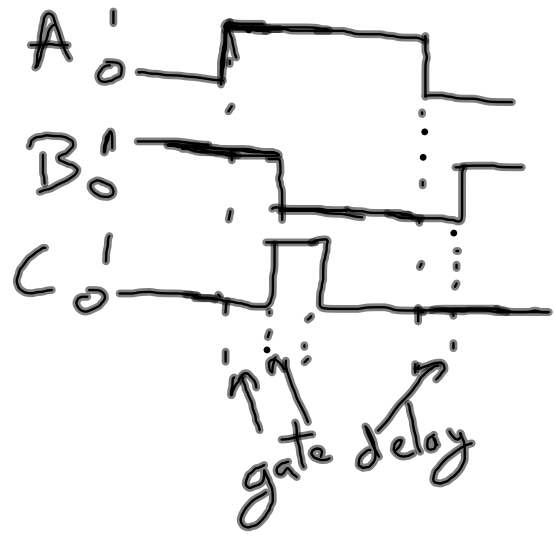
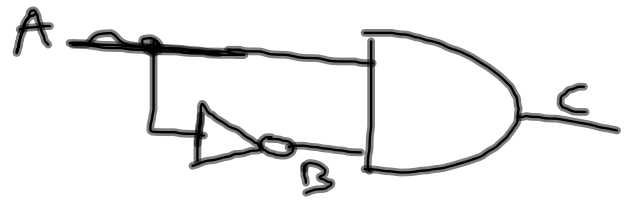
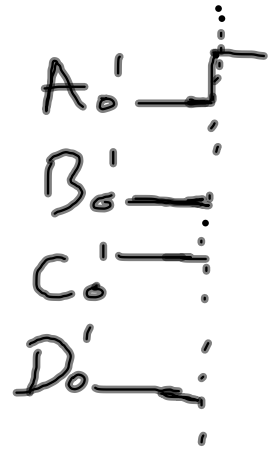
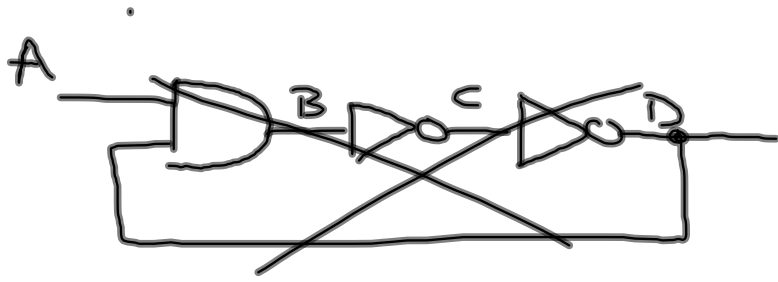
PLA

3x2

F1: majority

$\left[\begin{array}{l} \bar{A}BC \\ A\bar{B}C \\ AB\bar{C} \\ ABC \end{array} \right.$



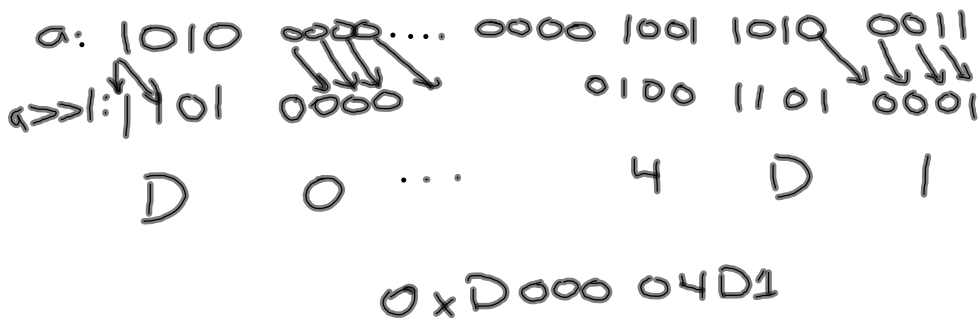


	$A+B$	or	$A \vee B$	$A B$
AB	$A \cdot B$	and		$A \& B$
	\bar{A}	not		$A \# B$

C++	Bitwise
OR	$a b$
and	$a \& b$
not	$\sim a$
xor	$a \wedge b$
right shift	$a \gg 2$
left shift	$a \ll 2$

```
int a = 0x5;
      (0...0101)
int b = a >> 1;
cout << b;
      (0...010)(2)
```

```
int a =
0xA00009A3
```



0101	5
1010	$5 \ll 1 = 10$
10100	$10 \ll 1 = 20$

<http://cs.gettysburg.edu/~cpresser/cs221/examples/2-21/>



/Courses/cs221