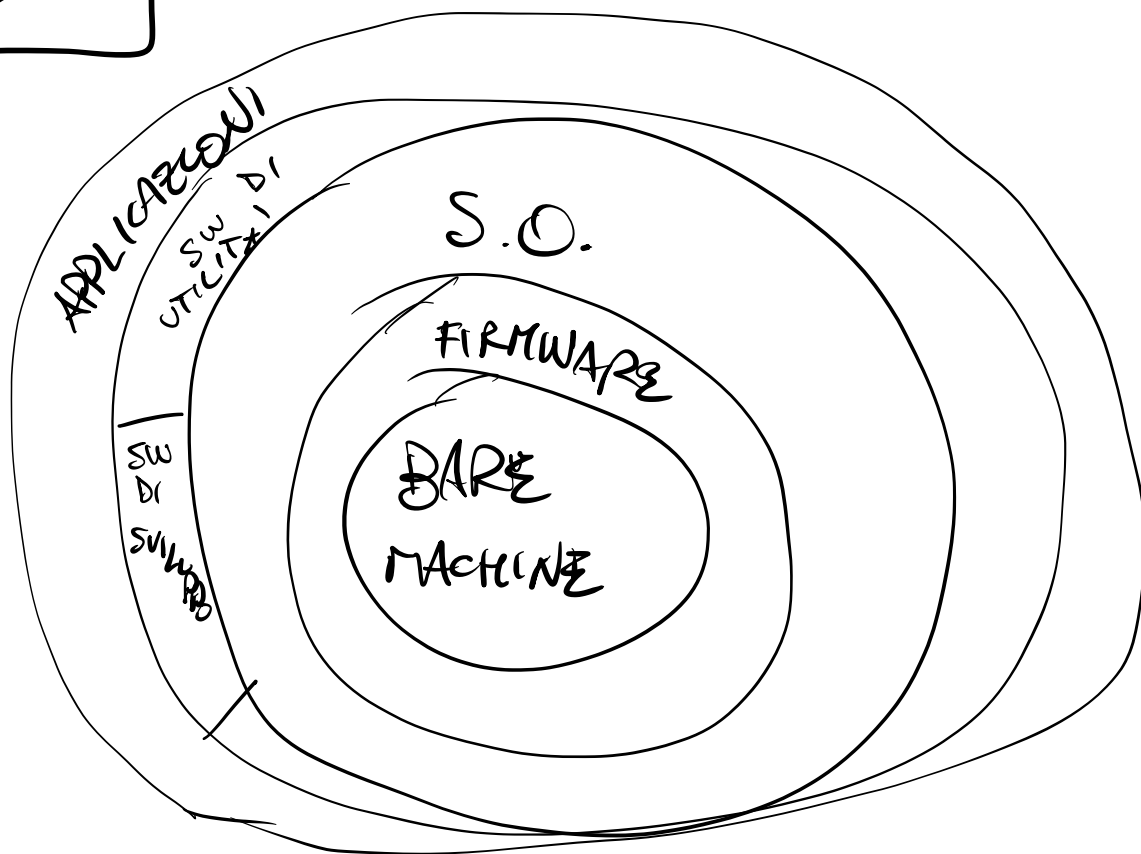


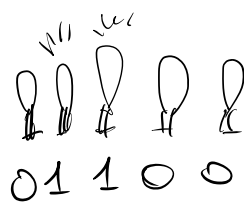
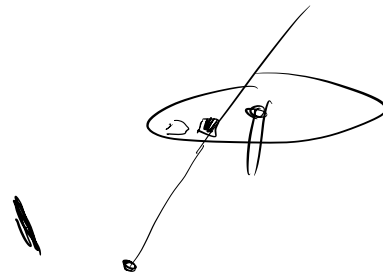
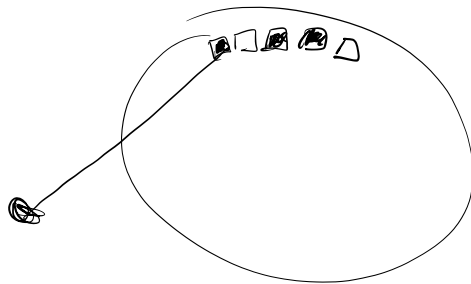
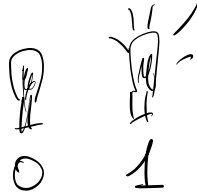
SW



MACCHINA DI VON NEUMANN

MEMORIA

- BIT



1 BYTE = 8 BIT

INDIRIZZO
(DI MEMORIA)

0	01001101
1	10001010
2	00001011
3	...

$$2^8 = 256$$

0	00000000	} GRUPPO DI UN BYTE
1	00000001	
↕	⋮	
255	11111111	

b

BIT

B

BYTE

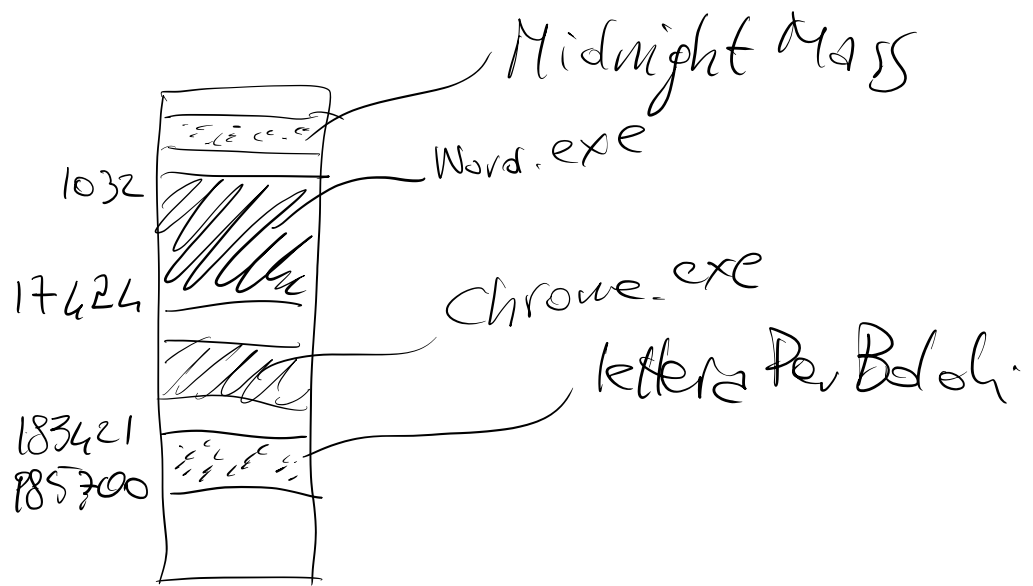
$$32 \text{ b} = 4 \text{ B}$$

$$1 \text{ KiB} = 2^{10} \text{ B} = 1024 \text{ B}$$

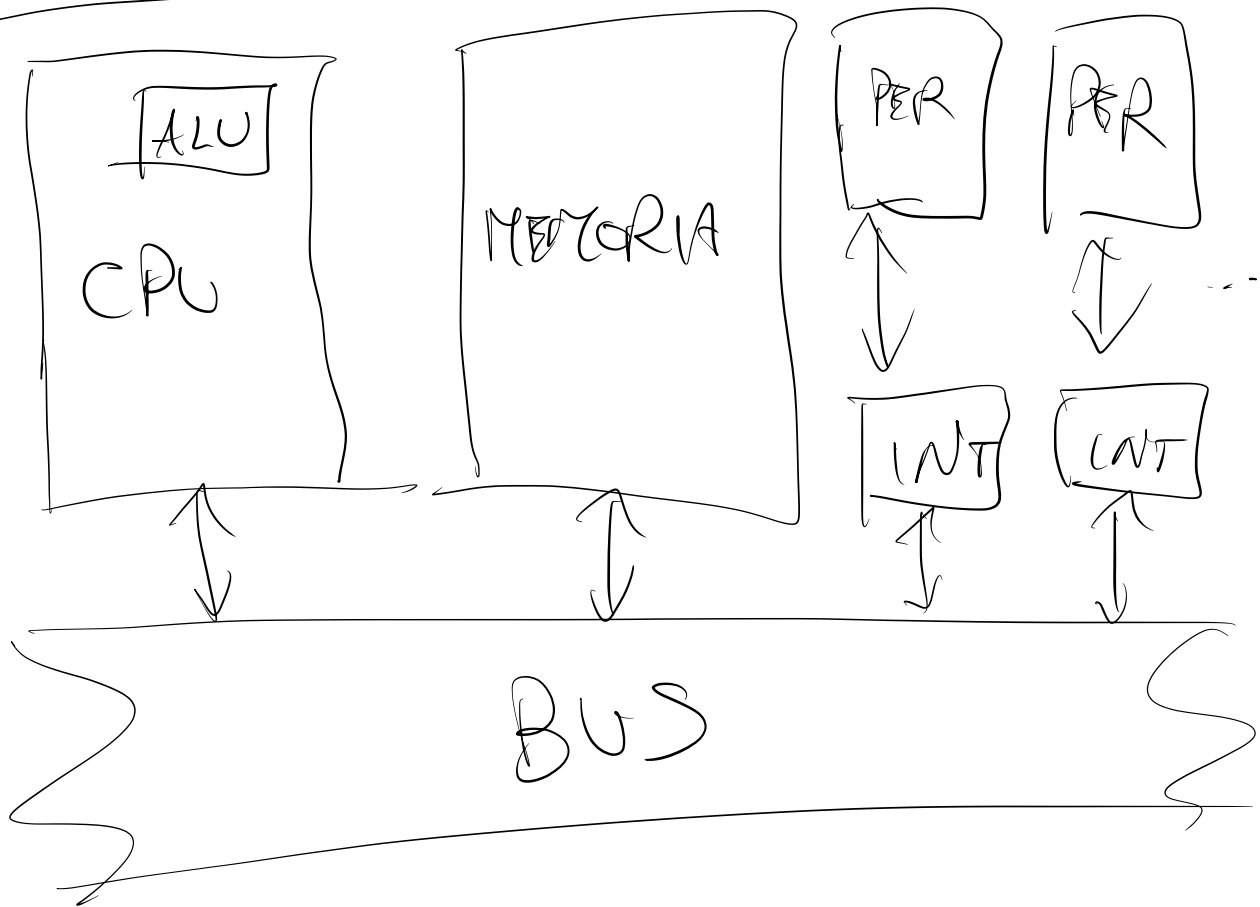
$$1 \text{ MiB} = 2^{20} \text{ B} = 1048576 \text{ B}$$

$$1 \text{ GiB} = 2^{30} \text{ B}$$

$$1 \text{ TiB} = 2^{40} \text{ B}$$



MACCHINA DI VON NEUMANN





1) FETCH

2) DECODE

3) EXECUTE

1000:	lw	\$2, 2000(\$0)
1004:	add	\$3, \$0, \$0
1008:	add	\$4, \$3, \$0
1012:	mult	\$4, \$4, \$4
1016:	slt	\$5, \$4, \$2
1020:	beq	\$5, \$0, +8
1024:	addi	\$3, \$3, +1
1028:	j	1008
1032:	sw	\$3, 3000(\$0)

1000: lw \$2, 2000(\$0)
 1004: add \$3, \$0, \$0
 1008: add \$4, \$3, \$0
 1012: mult \$4, \$4, \$4
 1016: slt (\$5, \$4, \$2)
 1020: beq \$5, \$0, +8
 1024: addi \$3, \$3, +1
 1028: j 1008
 1032: sw \$3, 3000(\$0)

\$0	0
\$1	
\$2	17
\$3	5
\$4	25
\$5	0
PC	1008
IR	lw \$2, 2000(\$0)

MEM	
1000	
1035	
2000	17
3000	5

$$\begin{aligned} \$4 < \$2 &\rightarrow \$5 < 1 \\ \text{2ltr. } \$5 &\leftarrow 0 \end{aligned}$$

"3000" $\leftarrow$ il primo intro
il cui guadagno
è $\geq$ "2000"

"3000" $\leftarrow$ "2000"