Physical Memory
256 bytes – requires 8 bits to address

00000000
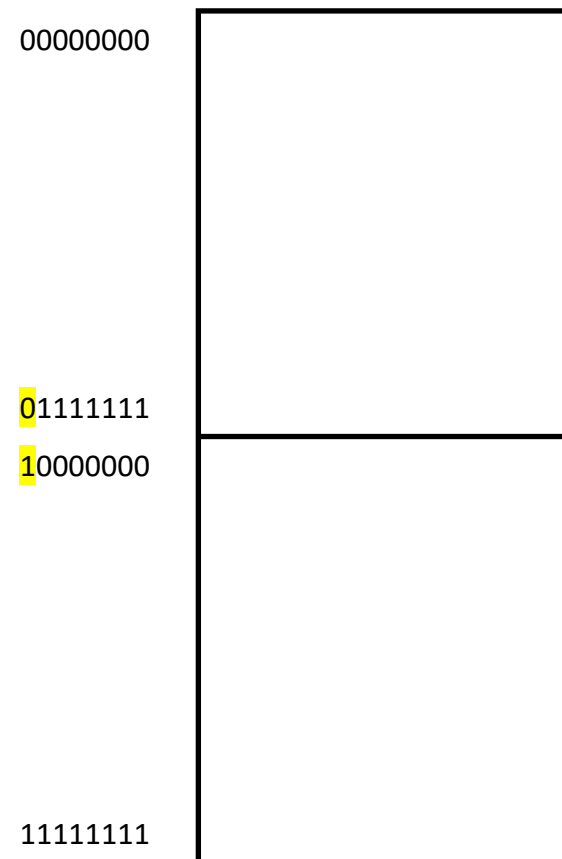
11111111

Physical Memory
256 bytes – requires 8 bits to address
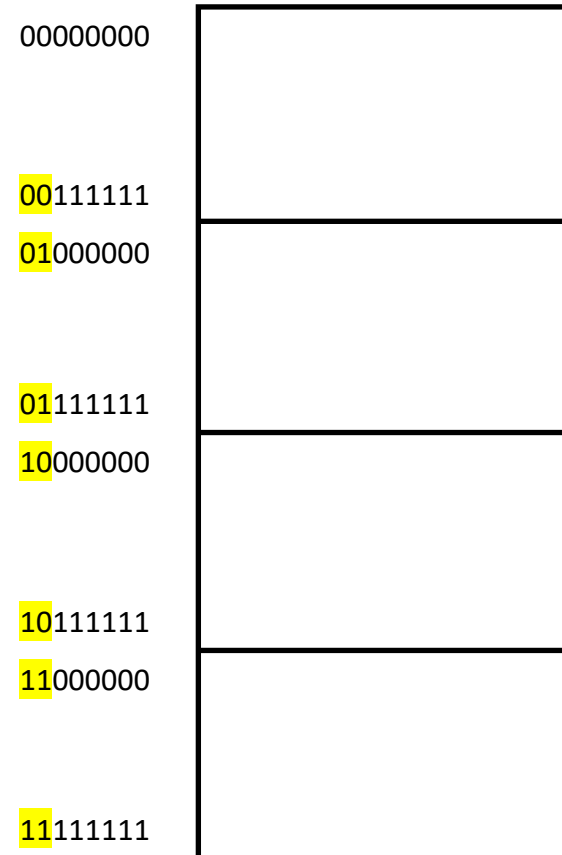Break into 2 parts- note 1st block 0 in 1st bit, 2nd has a 1

00000000

01111111
10000000

11111111

Physical Memory
256 bytes – requires 8 bits to address
Break into 4 parts- note first 2 bits in each block

00000000

00111111
01000000

01111111
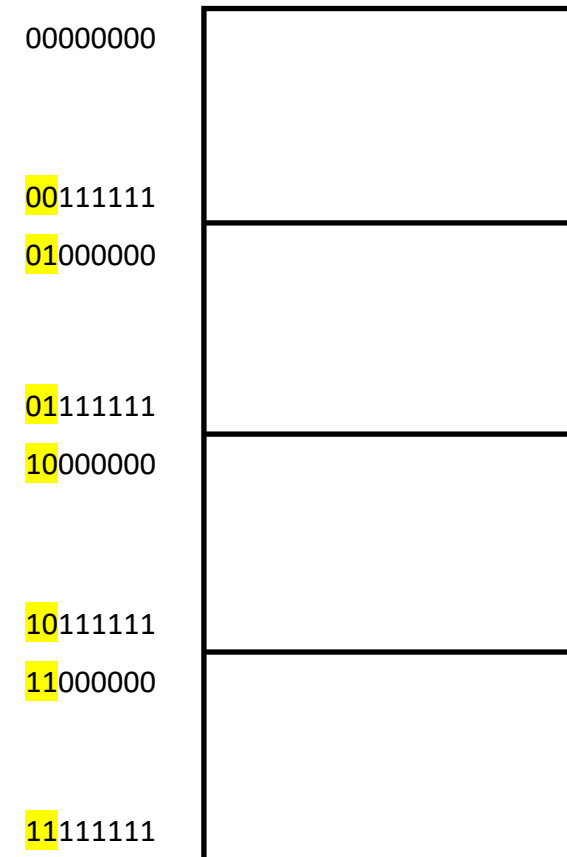10000000

10111111
11000000

11111111

What if we have 2 processes
A and B that need 2 blocks and
1 block of memory to run?

Physical Memory
256 bytes – requires 8 bits to address
Break into 4 parts- note first 2 bits in each block

00000000

00111111

01000000

01111111

10000000

10111111

11000000

11111111

What if we have 2 processes
A and B that need 2 blocks and
1 block of memory to run?

The OS does this nifty lookup
trick (virtual to physical page)

Process A

00	01
01	11
10	-
11	-

Process B

00	10
01	-
10	-
11	-

Physical Memory
256 bytes – requires 8 bits to address
Break into 4 parts- note first 2 bits in each block

00000000

00111111
01000000

A0

01111111
10000000

B0

10111111
11000000

A1

11111111

What if we have 2 processes
A and B that need 2 blocks and
1 block of memory to run?

The OS does this nifty lookup
Trick (virtual to physical page)

Process A

00	01
01	11
10	-
11	-

Process B

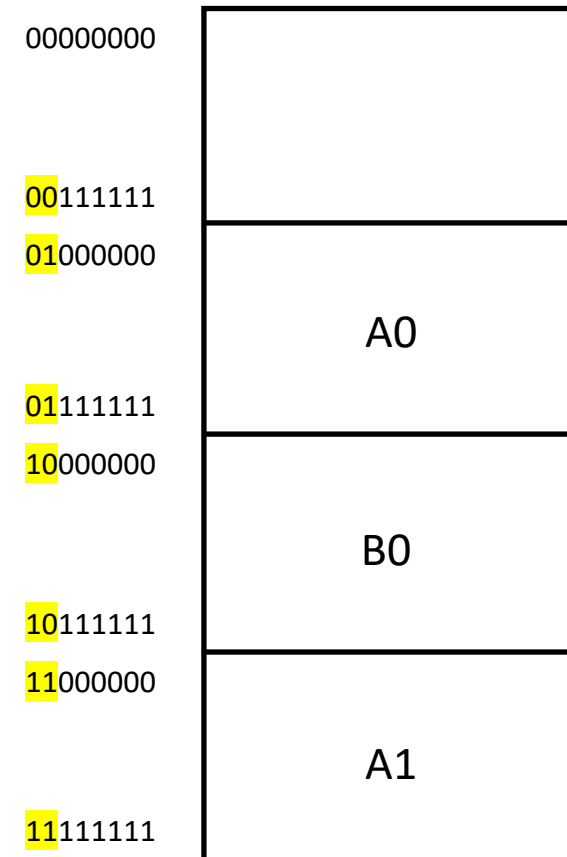| 00	10
01	-
10	-
11	-

So if want to get to 00101010 in B
Sub 10 for 00 to get 10101010

Neither process can access others memory

Physical Memory
256 bytes – requires 8 bits to address
Break into 4 parts- note first 2 bits in each block

00000000

00111111
01000000

A0

01111111
10000000

B0

10111111
11000000

A1

11111111

What if we have 2 processes
A and B that need 2 blocks and
1 block of memory to run?

The OS does this nifty lookup
Trick (virtual to physical page)

Physical Memory
256 bytes – requires 8 bits to address
Break into 4 parts- note first 2 bits in each block

Process A

00	01
01	11
10	-
11	-

Process B

00	10
01	-
10	-
11	-

So if want to get to 00101010 in B
Sub 10 for 00 to get 10101010

Neither process can access others memory

00000000

00111111
01000000

A0

01111111
10000000

B0   ← 00101010 here

10111111
11000000

A1

11111111