

CS162
Operating Systems and
Systems Programming
Lecture 10

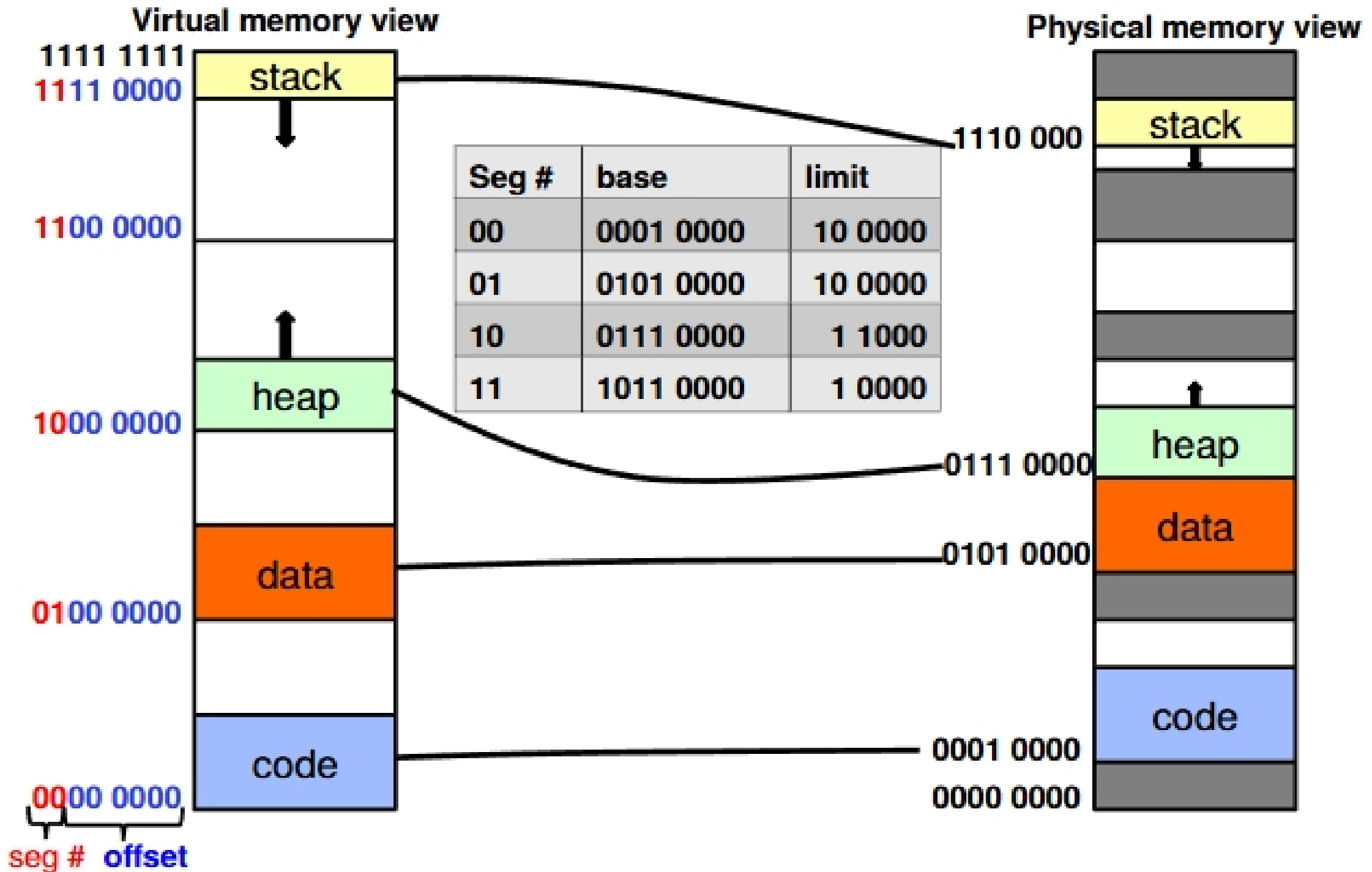
Caches and TLBs

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Review: Address Segmentation



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Virtual memory view

1111 1111

stack

1110 0000

What happens if stack grows to 1110 0000?

1000 0000

heap

0100 0000

data

0000 0000

code

seg # offset

Seg #	base	limit
00	0001 0000	10 0000
01	0101 0000	10 0000
10	0111 0000	1 1000
11	1011 0000	1 0000

Physical memory view

1110 0000

stack

0111 0000

heap

0101 0000

data

0001 0000

code

0000 0000