

CSED211 Homework #4, Due Nov. 12, 2021

1. Exercise 6.25 on page 686 with the following table.

Cache	m	C	B	E	S	t	s	b
1	48	64KB	32	4				
2	48	64KB	32	8				
3	48	64KB	32	16				
4	48	64KB	64	1				
5	48	64KB	64	2				
6	48	64KB	64	8				

2. Exercise 6.29 on page 687 with the following assumption

Assumption:

- There are only two sets ($S = 2$).
- Set index 0 is 0 and set index 2 is 1. There are no entries for set 1 and 3.

3. Exercise 6.35 on page 689 with the following assumption

Assumption:

- The cache 2-way set-associative, write-through, write-allocate, with a block size of 16 bytes,
- The total size of cache is 256.

4. Exercise 6.42 on page 695

5. Practice Problem 7.5 on page 731 when the linker relocates .text in m.o to address 0x4004d0 and swap to address 0x4003e8.

6. Exercise 7.8 on page 751

7. Exercise 7.10 on page 752