CS 3021: Computer Architecture 2
Tutorial 6

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Question 1:

i) Cache hits: 9
Cache misses: 23

ii) Cache hits: 13
Cache misses: 19

iii) Cache hits: 15
Cache misses: 17

iv) Cache hits: 16
Cache misses: 16

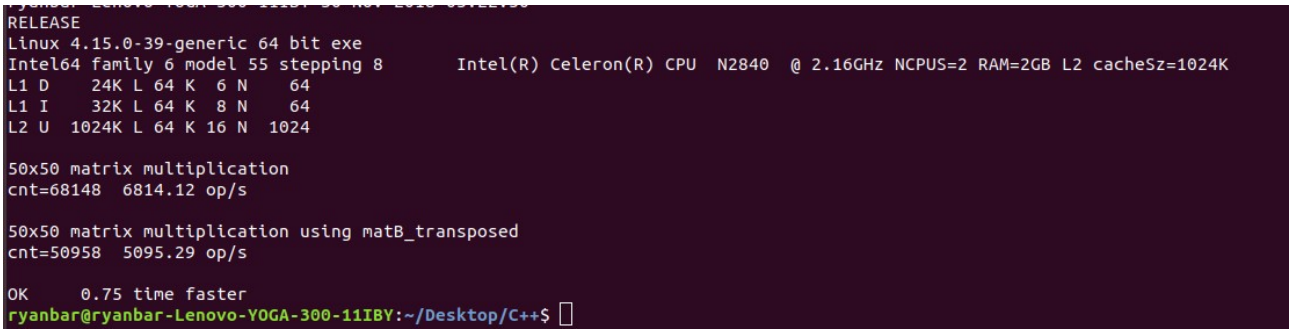
Question 2:

I used Java this time around to implement my cache simulation, here are the result when running the code:

```
ryanbar@ryanbar-Lenovo-YOGA-300-11IBY:~/Desktop/Java$ java Cache 8 1 16
Number of cache hit: 16
Number of cache miss: 16
ryanbar@ryanbar-Lenovo-YOGA-300-11IBY:~/Desktop/Java$ java Cache 4 2 16
Number of cache hit: 15
Number of cache miss: 17
ryanbar@ryanbar-Lenovo-YOGA-300-11IBY:~/Desktop/Java$ java Cache 2 4 16
Number of cache hit: 13
Number of cache miss: 19
ryanbar@ryanbar-Lenovo-YOGA-300-11IBY:~/Desktop/Java$ java Cache 1 8 16
Number of cache hit: 9
Number of cache miss: 23
ryanbar@ryanbar-Lenovo-YOGA-300-11IBY:~/Desktop/Java$
```

The first argument is the value for k, the second is n and the third is for l

Question 3:



I don’t get any speed up, actually I get a slow down and if I put the code for the transpose outside the loop timing the execution time, I don’t get any speedup or slow down. I have either made a mistake in the source code or my computer is really that slow.