EECS 560

Lab6-Summary

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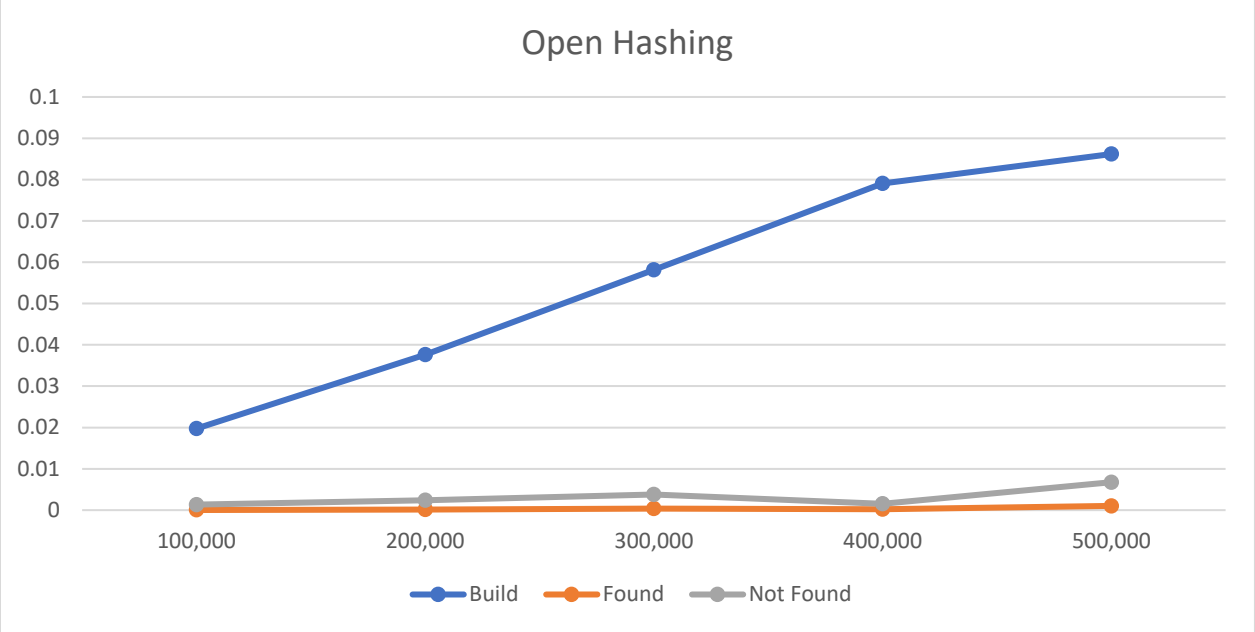
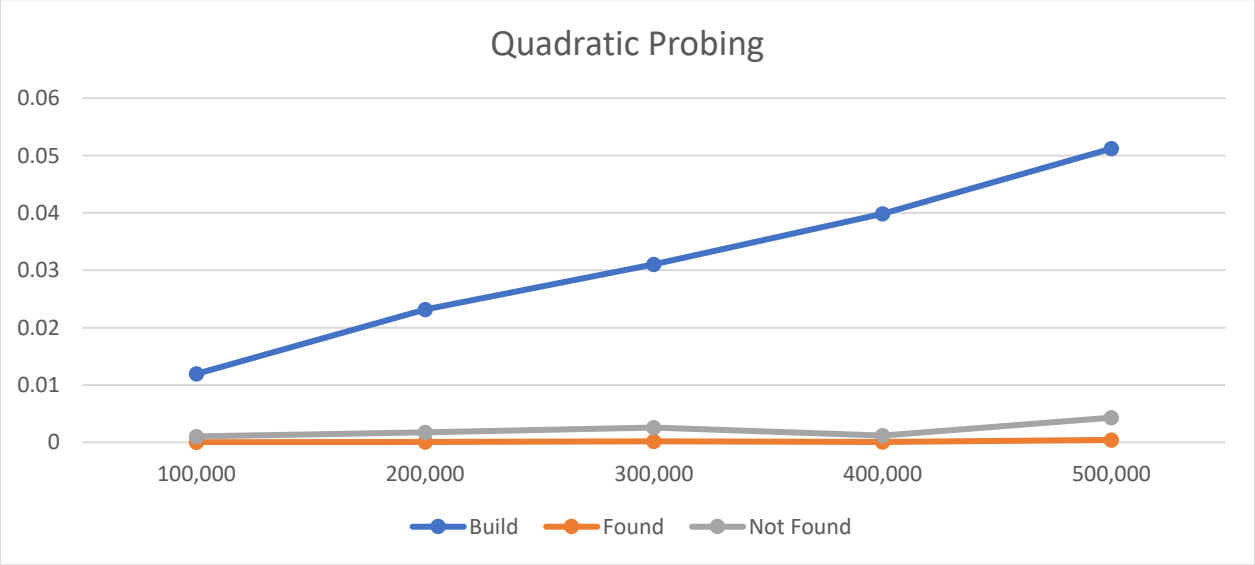
Performance(Open Hashing):

n	100,000	200,000	300,000	400,000	500,000
Build	0.0197434	0.0376292	0.0581348	0.0790846	0.0861796
Found	3.38e-05	0.0001412	0.0003566	0.0002064	0.0010242
Not Found	0.0013394	0.0023824	0.0037832	0.0015106	0.0067578



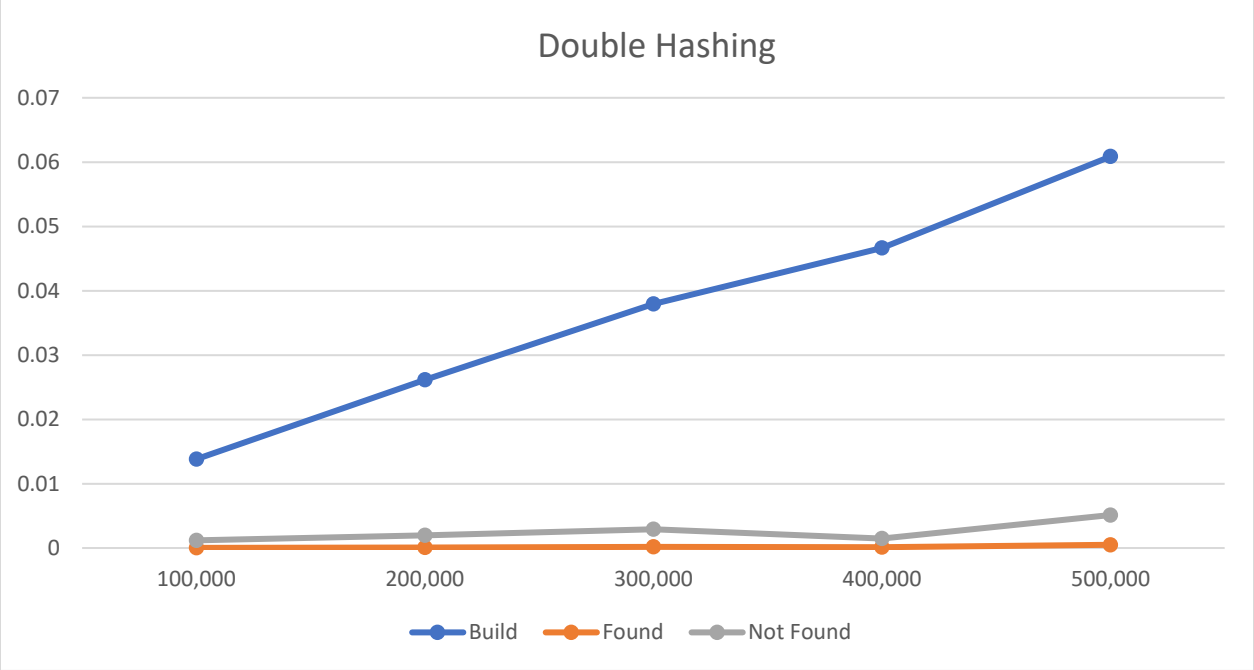
Performance(Quadratic Probing):

n	100,000	200,000	300,000	400,000	500,000
Build	0.01193	0.0231596	0.031032	0.039835	0.0511936
Found	2.26e-05	8.32e-05	0.0001828	9.46e-05	0.000425
Not Found	0.001035	0.0017248	0.0025678	0.0011786	0.0043022



Performance(Double Hashing):

n	100,000	200,000	300,000	400,000	500,000
Build	0.0138172	0.026135	0.0379184	0.0466708	0.0608552
Found	2.52e-05	8.72e-05	0.0001808	0.0001092	0.000502
Not Found	0.0011936	0.0019864	0.0029406	0.0014864	0.005129



Summary:

1. Open Hashing is the lowest one for insertion, searching successfully and searching unsuccessfully. Quadratic Probing is the most efficient one for insertion, searching successfully and searching unsuccessfully.
2. Found successfully is faster than found unsuccessfully for Open Hashing, Quadratic Probing, and Double Hashing.
3. With the increasing of the number of elements, the CPU time of three hash tables is increasing linearly for insertion method.