

# Assignment 1

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## For Basic:

Key	Req1 (first time)	Req2 (second time)	Req3 (third time)	Average Time
Key1	0.002061877	0.001616479	0.001061752	0.001580036
Key2	0.001674101	0.004029026	0.002180129	0.002627752
Key3	0.002361401	0.002482654	0.002923464	0.002589173
Key4	0.003583991	0.002865448	0.00181699	0.002755476333
Key5	0.001601148	0.001601148	0.00222281	0.001808368667
Key6	0.001932086	0.001959335	0.001975552	0.001955657667

\*all turnaround times recorded in this table are in secs and are taken from wireshark

## Analysis:

As we can see all response times recorded here are very near within a particular range of error around a millisecond. But the difference may seem huge considering the response time (around 80 percent). But Values recorded in the table seem good and show what practically happens (different network delays).

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## For Star:

Key	Req1 (first time)	Req2 (second time)	Req3 (third time)
Key1	0.008606361	0.002360424	0.005675849
Key2	0.023839761	0.002799659	0.00235846
Key3	0.00500659	0.003702358	0.003837288
Key4	0.004644887	0.003168237	0.002675748
Key5	0.007975268	0.003225757	0.002895167
Key6	0.004389488	0.008790228	0.003576568
<b>Average Time</b>	0.009077059167	0.004007777167	0.00350318

\*all turnaround times recorded in this table are in secs and are calculated using wireshark

## Analysis:

As we can see here Req1 seems to be 2X higher than Req2 and Req3 in almost all six different keys. This is because for the first request cache server doesn't have the key-value pair in its cache so it tries to get it from the main server. So the actual response time for the first get request = response time of cache server + response time of main server. As the links here are same between all therefore delays between all must be almost same, Hence we get 2X higher response for Req1 compared to others. Response time in Req2 and Req3 are almost same with some error it can be justified easily from above.

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### **PLAGIARISM STATEMENT**

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