Assignment 1-REPORT

Key	Req1 (first time in seconds)	Req2 (second time in seconds)	Req3 (third time in seconds)	Average Time(in seconds)
Key1	0.0030	0.0038	0.0033	0.0034
Key2	0.0035	0.0036	0.0020	0.0030
Key3	0.0028	0.0034	0.0029	0.0030
Key4	0.0037	0.0035	0.0035	0.0036
Key5	0.0030	0.0030	0.0025	0.0028
Key6	0.0035	0.0035	0.0017	0.0029

OBSERVATION: In the above case, the average time taken to complete GET requests of all keys is approximately the same.

Key	Req1 (first time in seconds)	Req2 (second time in seconds)	Req3 (third time in seconds)
Key1	0.0168	0.0065	0.0078
Key2	0.0115	0.0061	0.0067
Key3	0.0117	0.0083	0.0058
Key4	0.0107	0.0056	0.0046
Key5	0.0068	0.0058	0.0055
Key6	0.0108	0.0078	0.0060
Average Time (in seconds)	0.0114	0.0067	0.0060

OBSERVATION: In the above case, the average time taken to complete GET requests in Req1 is higher than the time take by Req2 and Req3. Req2 and Req3 take approximately the same time.

JUSTIFICATION: The key is not in cache in Req1. So, the cache connects to server and server sends the value corresponding to the key to cache. The cache sends the value to client and also the key gets added in the cache memory. When we request the same key next time, the key is found in cache itself without connecting to server. This is the reason why Req1 takes more time than Req2 and Req3.

PLAGIARISM STATEMENT

We certify that this assignment/report is our own work, based on our personal study and/or research and that we have acknowledged all material and sources used in its preparation, whether they be books, articles, packages, datasets, reports, lecture notes, and any other kind of document, electronic or personal communication. We also certify that this assignment/report has not previously been submitted for assessment/project in any other course lab, except where specific permission has been granted

from all course instructors involved, or at any other time in this course, and that we have not copied in part or whole or otherwise plagiarized the work of other students and/or persons. We pledge to uphold the principles of honesty and responsibility at CSE@IITH. In addition, We understand my responsibility to report honor violations by other students if we become aware of it.

Name: NYALAPOGULA MANASWINI

Date: 15/10/2022

Signature: Monaswini