

CS20BTECH11006

Report

Part 1 - b

Key	Req1 (first time in ms)	Req2 (second time in ms)	Req3 (third time in ms)	Average Time (in ms)
Key1	0.68	0.67	0.68	0.6766
Key2	0.65	0.66	0.64	0.65
Key3	0.69	0.72	0.73	0.71
Key4	0.64	0.66	0.69	0.66
Key5	0.65	0.71	0.77	0.71
Key6	0.62	0.73	0.72	0.69

Part 2 -b

Key	Req1 (first time in ms)	Req2 (second time in ms)	Req3 (third time in ms)
Key1	1.61	0.58	0.50
Key2	1.69	0.57	0.49
Key3	1.33	0.62	0.47
Key4	1.34	0.52	0.47
Key5	1.28	0.52	0.46
Key6	1.17	0.50	0.49
Average Time (in ms)	1.40	0.55	0.48

Explanation:

Part 1 : In this part we had no cache, so we see that the turnaround time is similar for all the three requests. It is a simple client to server and back server to client model. This can be verified from the table above (part 1 -b)

Part 2: However, in the second part we notice that the first request takes longer to come back as compared to the subsequent two requests. This is because, when the first request is sent, the key value pair is stored in cache and the cache returns the value directly for the second and third requests, resulting in lower turnaround time. This can be verified from the table above (part 2 -b)

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