REPORT– CS20BTECH11037

BASIC SETUP

Key	Request1	Request2	Request3	Average Time
Key1	0.004550124	0.040714865	0.044119559	0.0297948493
Key2	0.043608590	0.044189434	0.042991251	0.0435964250
Key3	0.044793726	0.042257179	0.040971868	0.0426742577
Key4	0.043207618	0.051882754	0.077796912	0.0576290947
Key5	0.052131497	0.050331350	0.062674201	0.0550456827
Key6	0.040904656	0.044455567	0.054237317	0.0465325133

OBSERVATIONS

- From the average we can see that except for the first one other average request time is almost same and for the first one we got less because we got first request in very less time.
- This is because as every request will have same type of request and response for every key hence, we will get almost same average time for every key we are requesting.

STAR SETUP

Key	Request1	Request2	Request3
Key1	0.013514499	0.046952840	0.044561644
Key2	0.045351739	0.042345185	0.041742525
Key3	0.043377704	0.039398227	0.039807893
Key4	0.043066252	0.040312268	0.039088579
Key5	0.044041119	0.041912511	0.040669250
Key6	0.043458850	0.039671412	0.041429053
Average Time	**0.0388016938**	**0.0417654072**	**0.0412164907**

Differences Observed

- This is increased in this case instead of decreasing when compared to the basic setup where no cache is used

Justification for why differences observed

- As we can see that average time for request2 and request3 we have almost same average request time for all the six keys and for request1 we have smaller value than the request2, request3.
- This is because as this is not real-world cache scenario and hence here the processing time of packet is increased when compared to transmission time of packet as here transmission time will be very less for every packet transmission because here, we are just using our local simulation but in the real-world transmission delay would become very significant such that there processing time will be negligible when compared to transmission delay.
- Hence, here processing time will be very significant that the transmission delay and hence we get the average times more than excepted.
- Hence, here time is increased instead of decreasing as excepted.