## **Problem**

Imagine you are a network administrator for a medium-sized company. You have implemented a web cache in your company to improve the overall efficiency of data retrieval. Your network configuration is as:- Total daily web requests: 50,000, Average size of a web page: 2 MB, Average request rate to servers: 5/sec, LAN capacity: 1 Gbps, WAN link capacity: 100 Mbps, and Average end-to-end delay for a web request: 100 ms. with the hit rate of the cache server is 40%. Does installing this particular cache server help us to reduce service delay?