

Assignment 2

Hint:

Question 1. Chapter 6, External Memory

Question 2. Chapter 10. Instruction Sets. You can assume short yet meaningful variables to represent marks. For example, Q1 for marks of Quiz1, Q2 for marks of Quiz2 etc.

Question 1

Consider a disk with an average seek time of 4 ms, rotation speed of 15,000 rpm and 512 byte sectors with 500 sectors per track. Suppose that we wish to read a file consisting of 5000 sectors for a total of 2.56 Mbytes. What is the total time of transfer.

Question 2

Using two- and three- address instructions, compute

$$\text{Total_Marks} = [(\text{Quiz1} + \text{Quiz2} + \text{Quiz3})/3 + \text{Mids} + \text{Finals}] * 0.7 + [\text{Labs} * 0.3]$$