

Operating System and System Administration



Tutorial 09

Year 02 Semester 01 2021

Department of Information Technology, Faculty of Computing

1. Disk requests come in the disk driver (0 to 999 cylinders) for cylinders 400, 200, 100, 500, 800, and 300, in that order. A seek takes 10 msec per cylinder moved. Assuming the arm is initially at cylinder 600, and moving toward larger cylinder number for a disk with 1000 cylinders, how much seek time is needed for: (6 marks)
 - i. SCAN algorithm.
 - ii. LOOK algorithm

2. Disk requests come in the disk driver for cylinders 10, 22, 2, 40, 6, and 38, in that order. A seek takes 6 msec per cylinder moved. Assuming the arm is initially at cylinder 20, and moving toward larger cylinder number for a disk with 64 cylinders, how much seek time is needed for:
 - i. LOOK algorithm.
 - ii. C-SCAN