GSI018 – SISTEMAS OPERACIONAIS

Operating Systems – William Stallings – 7th Edition
Chapter 11 – Input/Output Management and Disk Scheduling

Nome Completo (Discente #1) – Nro. Matrícula – eMail Institucional
Nome Completo (Discente #2) – Nro. Matrícula – eMail Institucional

REVIEW QUESTIONS

11.1 List and briefly define three techniques for performing I/O.

11.2 What is the difference between logical I/O and device I/O?

11.4 Why would you expect improved performance using a double buffer rather than a single buffer for I/O?

11.5 What delay elements are involved in a disk read or write?

11.7 Briefly define the six (0 to 5) RAID levels.

PROBLEMS

11.3 Perform the same type of analysis as that of Table 11.2 – “Comparing Disk Scheduling Algorithms” for the following sequence of disk track requests: 27, 129, 110, 186, 147, 41, 10, 64, 120. Assume that the disk head is initially positioned over track 100 and is moving in the direction of decreasing track number.

(a) FIFO (starting at track 100)		**(b) SSTF** (starting at track 100)		**(c) SCAN** (starting at track 100, in the direction of increasing track number)		**(d) C-SCAN** (starting at track 100, in the direction of increasing track number)	
Next track accessed	**Number of tracks traversed**	**Next track accessed**	**Number of tracks traversed**	**Next track accessed**	**Number of tracks traversed**	**Next track accessed**	**Number of tracks traversed**
... ...		... ...		... ...		... ...	
Average seek length		**Average seek length**		**Average seek length**		**Average seek length**	