

CS – 342

Operating Systems

Project #4

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Analysis

After executing algorithms 100 times with random input, I found the mean and standard deviation of the algorithms as follows;

Mean fcfs: 1534298.125000

Mean sstf: 8901.280273

Mean scan: 9987.089844

Mean c_scan: 9753.559570

Mean look: 9960.509766

Mean c_look: 8916.990234

Std fcfs: 29725.424000

Std sstf: 34.522475

Std scan: 4.315309

Std c_scan: 29.814869

Std look: 11.376726

Std c_look: 1757.115747

According to the theory and data, SSTF (Shortest Seek Time First) algorithm performs best in terms of the disk movements. Also, FCFS (First Come First Served) algorithm gives the worst results in terms of disk movements. SCAN and C-SCAN algorithms have smallest standard deviation among others as expected. LOOK algorithm has also lower standard deviation. Therefore, my program justifies the theory.