

Disk Scheduling Algorithms

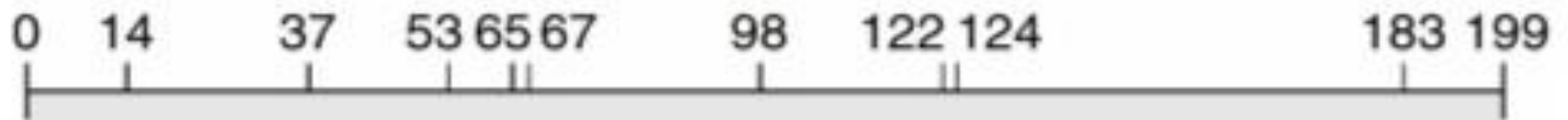
Sample problem:

- Consider for example an ordered disk queue with requests involving
 - Tracks 98, 183, 37, 122, 14, 124, 65, 67
 - Head pointer 53
- The request queue (0-199)

FCFS

queue = 98, 183, 37, 122, 14, 124, 65, 67

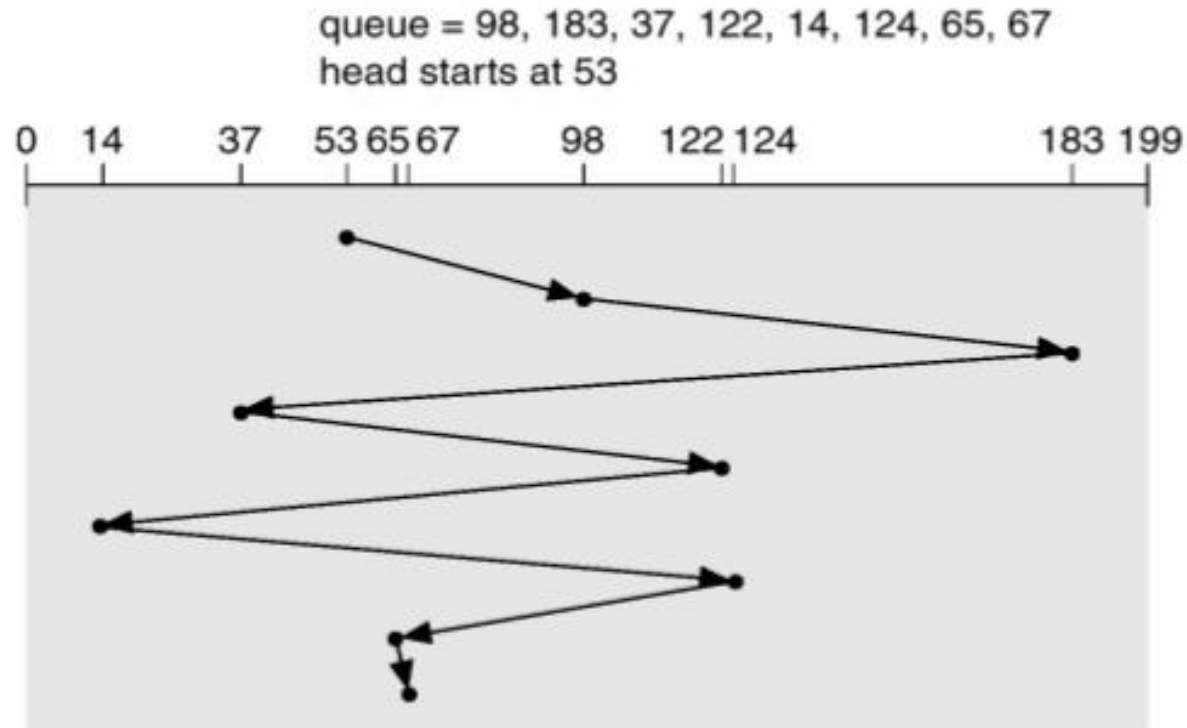
head starts at 53



FCFS

- 640 total head movements

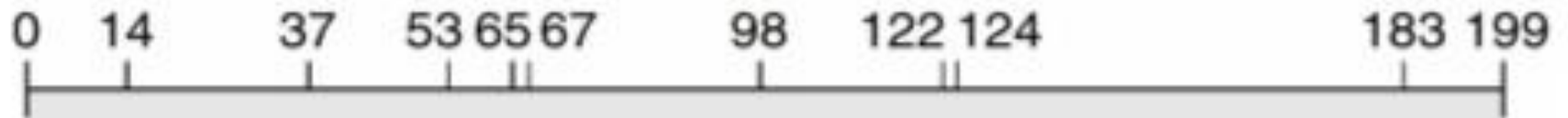
FCFS Scheduling



SSTF

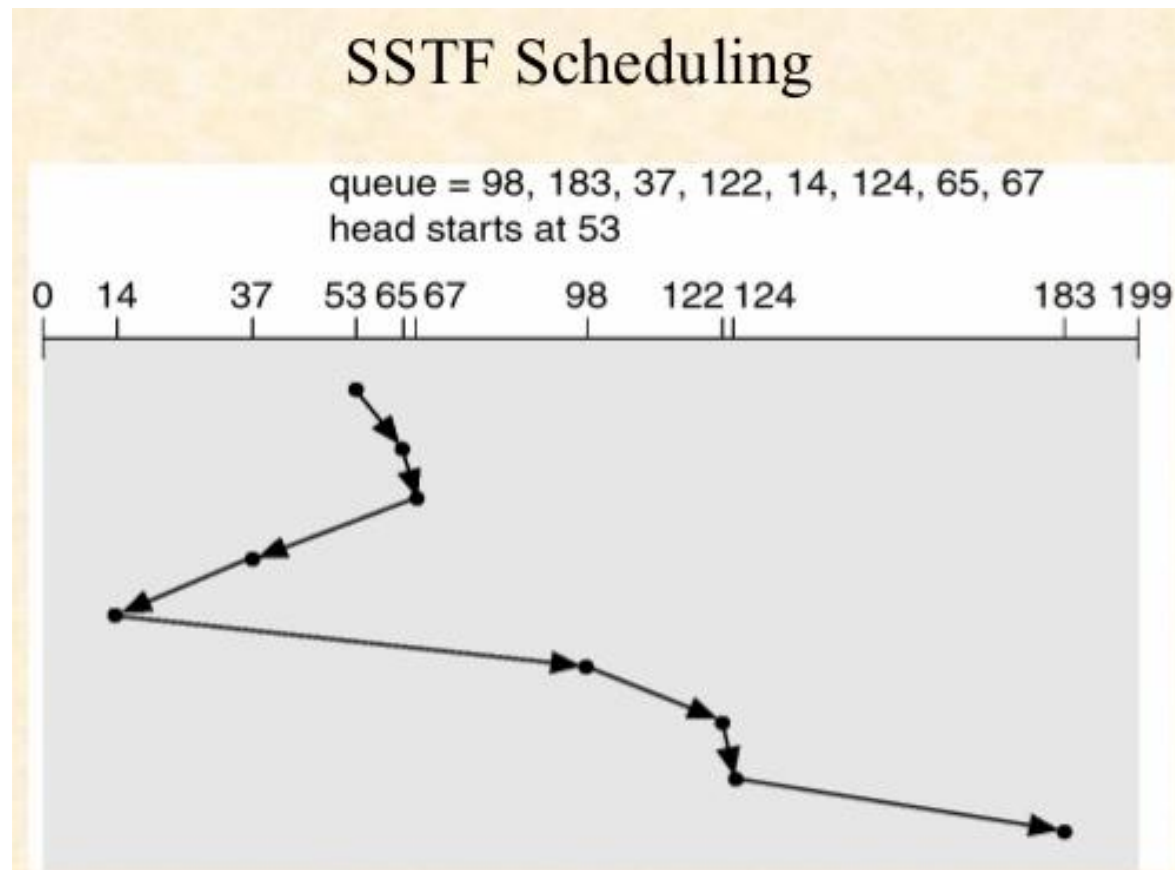
queue = 98, 183, 37, 122, 14, 124, 65, 67

head starts at 53



SSTF

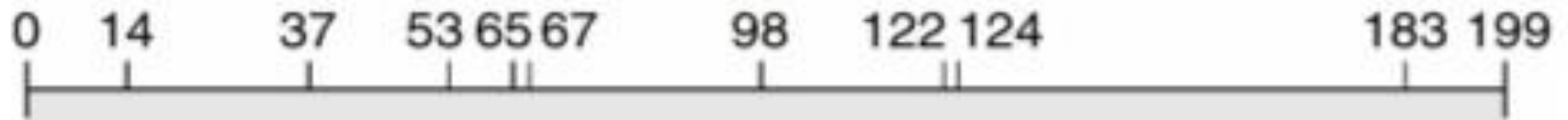
- 236 total head movements



SCAN (heading towards 0 or left direction)

queue = 98, 183, 37, 122, 14, 124, 65, 67

head starts at 53

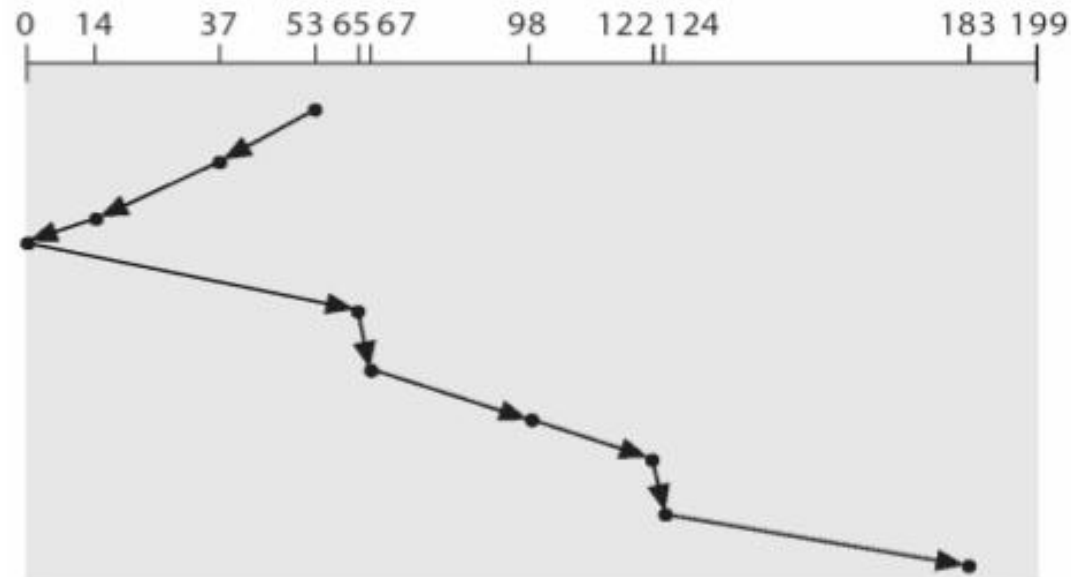


SCAN

- 238 total head movements

SCAN Scheduling

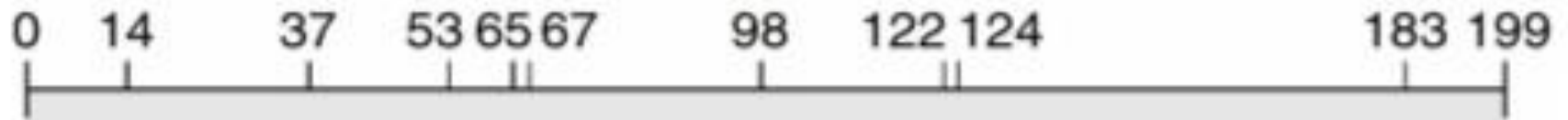
queue = 98, 183, 37, 122, 14, 124, 65, 67
head starts at 53



C-SCAN (heading towards right direction)

queue = 98, 183, 37, 122, 14, 124, 65, 67

head starts at 53

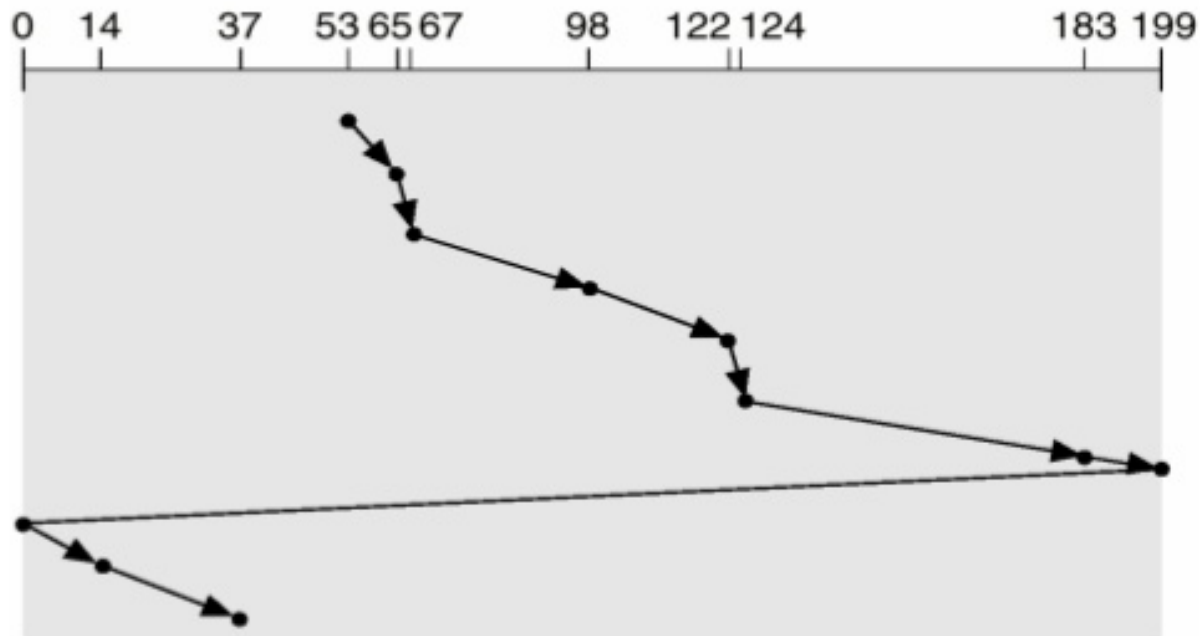


C-SCAN

- 382 total head movements

C-SCAN Scheduling

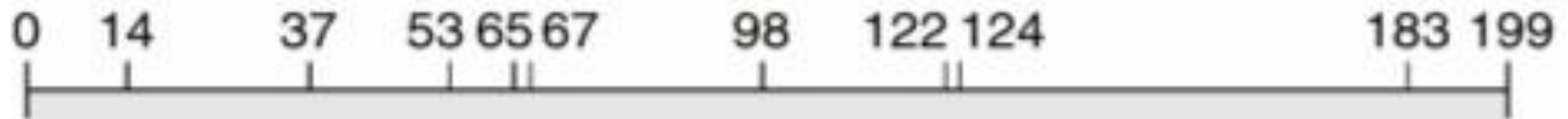
queue = 98, 183, 37, 122, 14, 124, 65, 67
head starts at 53



LOOK (heading towards right direction)

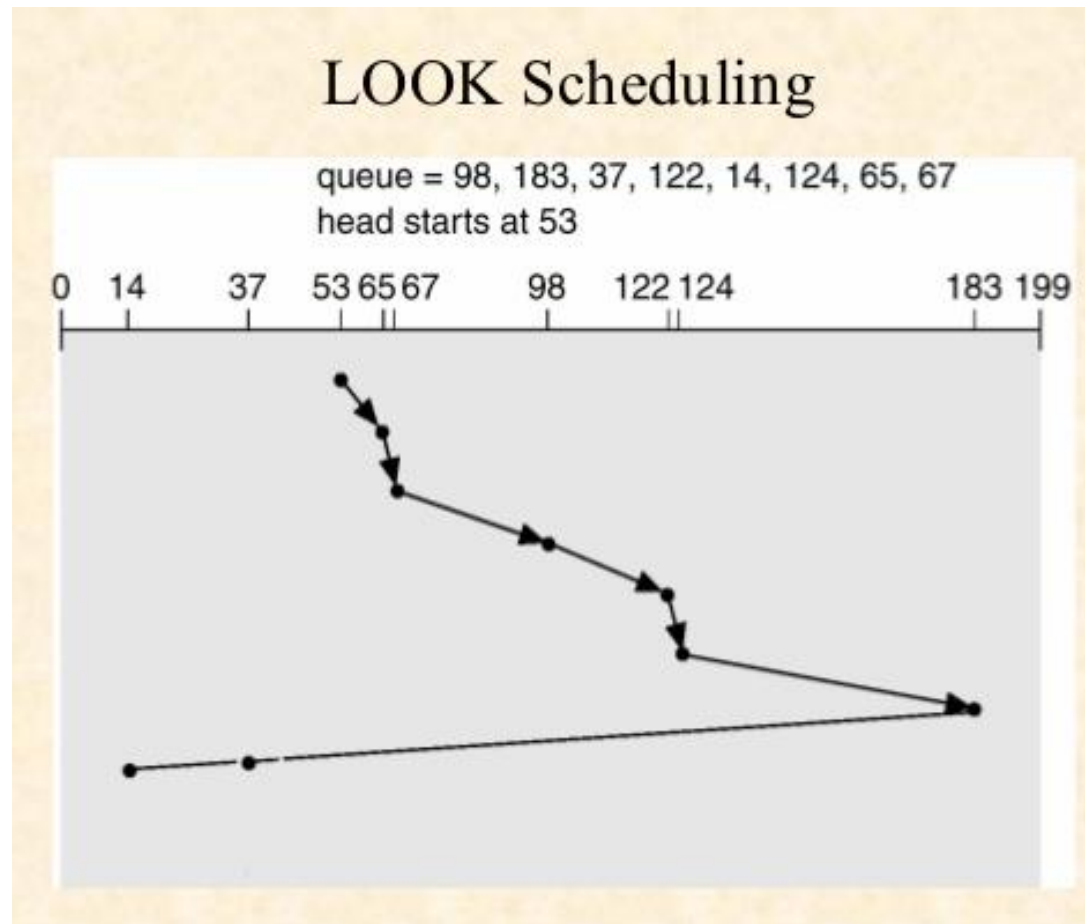
queue = 98, 183, 37, 122, 14, 124, 65, 67

head starts at 53



LOOK

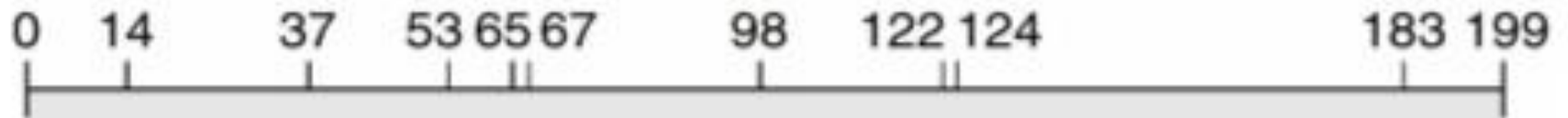
- 299 total head movements



C-LOOK

queue = 98, 183, 37, 122, 14, 124, 65, 67

head starts at 53



C-LOOK

- 338 total head movements

C-LOOK Scheduling

