Name : Pushpak N. Gadhe
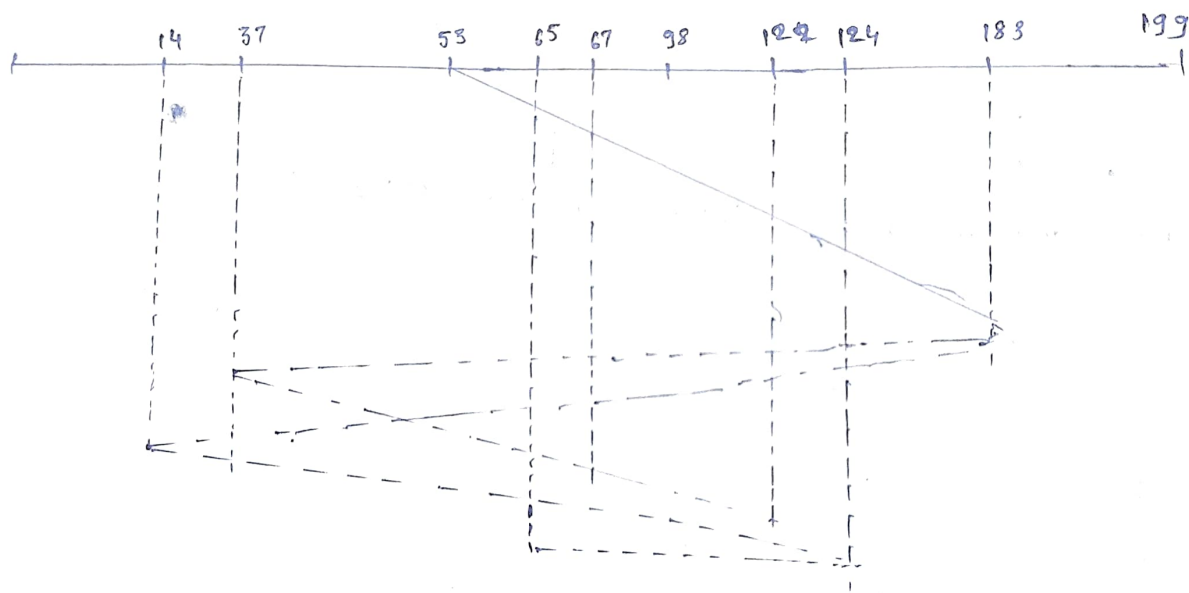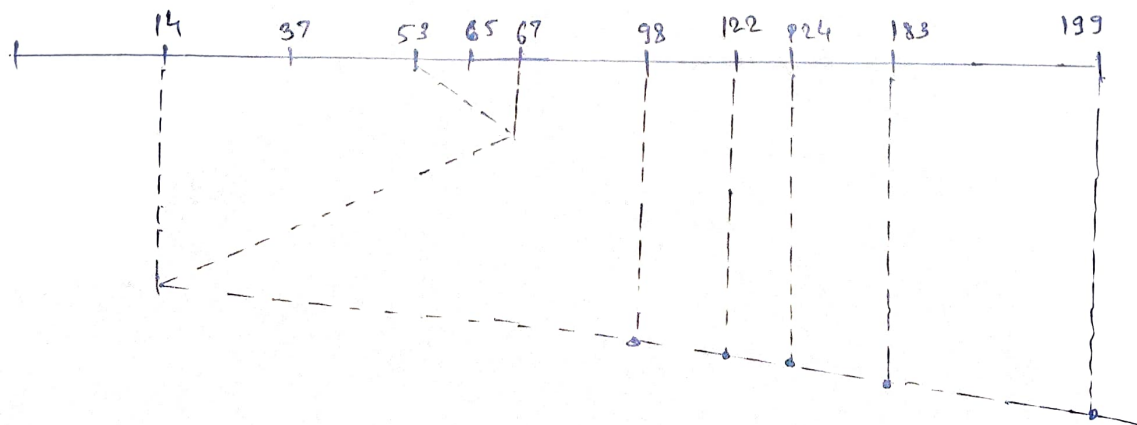
Class : CS - AIML - A

Roll no. : 22 ,.

Consider the following order of request for cylinder access of the disk is (98, 183, 37, 122, 14, 124, 65, 67) and current position of read / write head is 53. Find the total head movements to access the data on the cylinder using following algorithm.
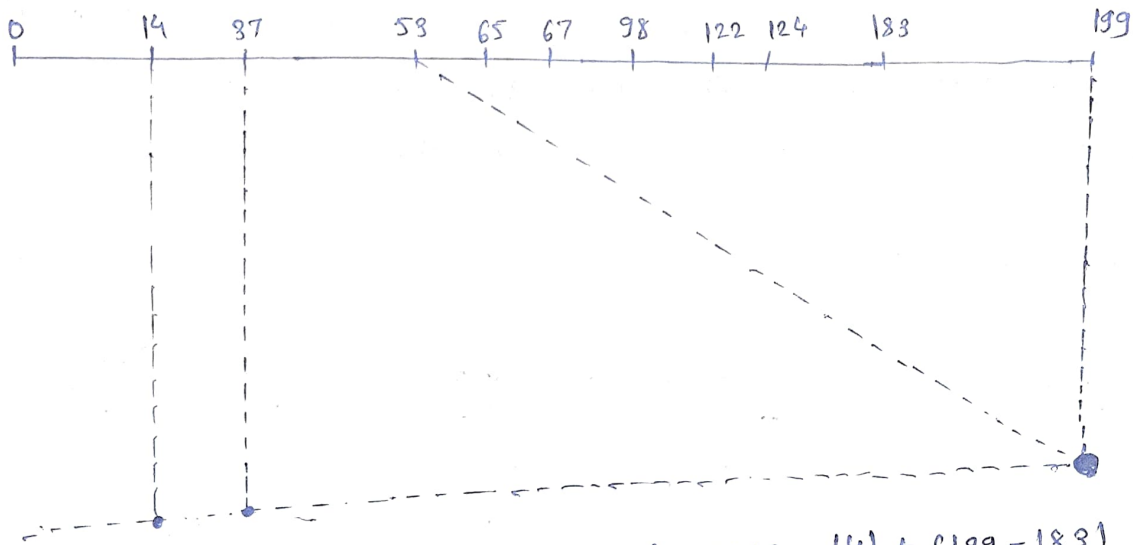
ⓐ First come first serve

total head movements = (183 - 53) + (183 - 37) + (122 - 37) + (122 - 14) + (124 - 14) + (124 - 65) + (67 - 65)

= 130 + 146 + 85 + 108 + 110 + 59 + 2

= 640.

ⓑ Shortest seek time first : (98, 183, 37, 122, 14, 124, 65, 67)

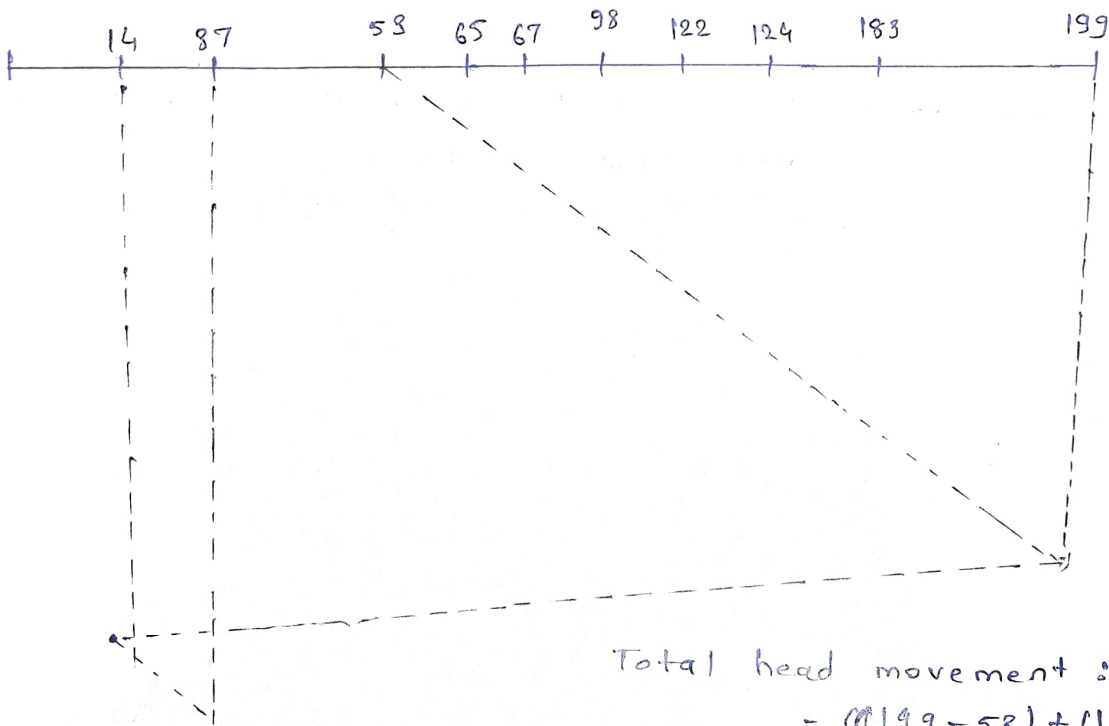head movement total : $(67-53) + (67-14) + (183-14)$

$$= 14 + 53 + 169$$

$$= 236$$

© ScaN :

| 0 | 14 | 87 | | 53 | 65 | 67 | 98 | 122 | 124 | 183 | | 199 |

Total head movement : $= (183 - 53) + (183 - 14) + (199 - 183)$

$$= 299 + 16$$

$$= 315.$$

C - Scan :

| | 14 | 87 | | 53 | 65 | 67 | 98 | 122 | 124 | 183 | | 199 |

Total head movement :

$$= (199 - 53) + (199 - 0) + (37 - 0)$$

$$= 382$$