

Week15-Assignment-Report

- 11911609-葛兆宁

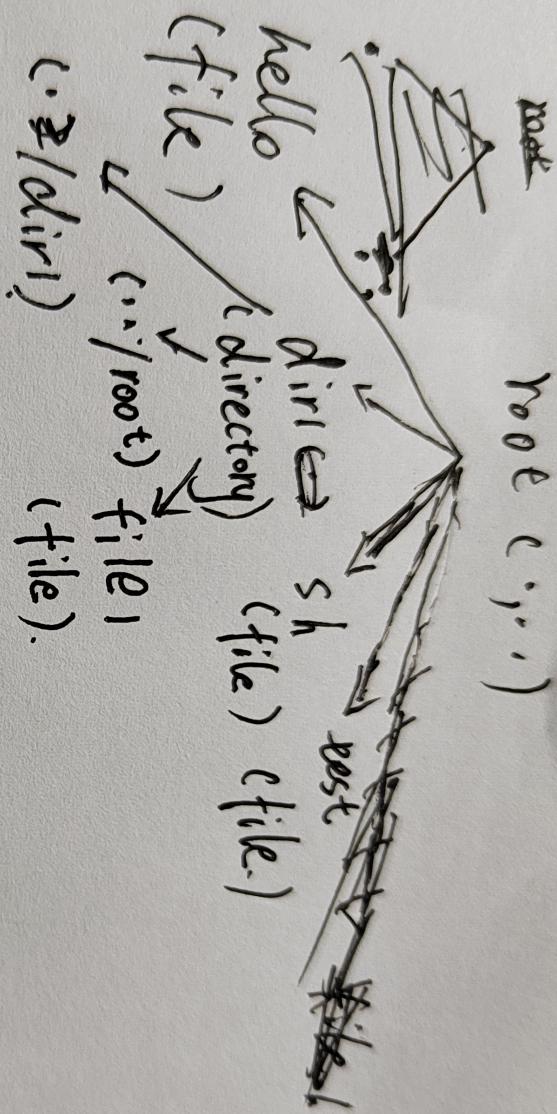
Q1

1. Seek Time + Rotational latency + Transfer Time

2.

| schedule idea | access sequence | required time |
|----------------------|--------------------------|---|
| FIFO | 70,30,90,60,20 | $\text{seek time} = (70-100 + 30-70 + 90-30 + 120-90 + 60-120 + 60-20) \times 1\text{ms} = 260\text{ ms}$ $\text{rotation latency} = 6 \times 0.5 \times 5\text{ms/r} = 15\text{ms}$ $\text{total_time} = \text{seek time} + \text{rotation latency} = 275\text{ms}$ |
| SSTF | 90,70,60,30,20,120 | $\text{seek time} = (100-90 + 90-70 + 70-60 + 60-30 + 30-20 + 20-120) \times 1\text{ms} = 180\text{ms}$ $\text{rotation latency} = 15\text{ms}$ $\text{total time} = 195\text{ms}$ |
| SCAN | 120,199,90,70,60,30,20 | $\text{seek time} = (99 + 179) \times 1\text{ms} = 278\text{ms}$ $\text{rotation latency} = 15\text{ms}$ $\text{total time} = 293\text{s}$ |
| CSCAN | 120,199,0,20,30,60,70,90 | $\text{seek time} = (99 + 199 + 90) \times 1\text{ms} = 388\text{ms}$ $\text{rotation latency} = 15\text{ms}$ $\text{total_time} = 403\text{ms}$ |

Q2



these are all entry in `sts.ls()`,
the name under it means the entry
belongs to which type of file.

- Those are the things I've tried my best to describe...even though I've read the Lab-15 doc many time...