

OS Lab Report – Week 12 & 13

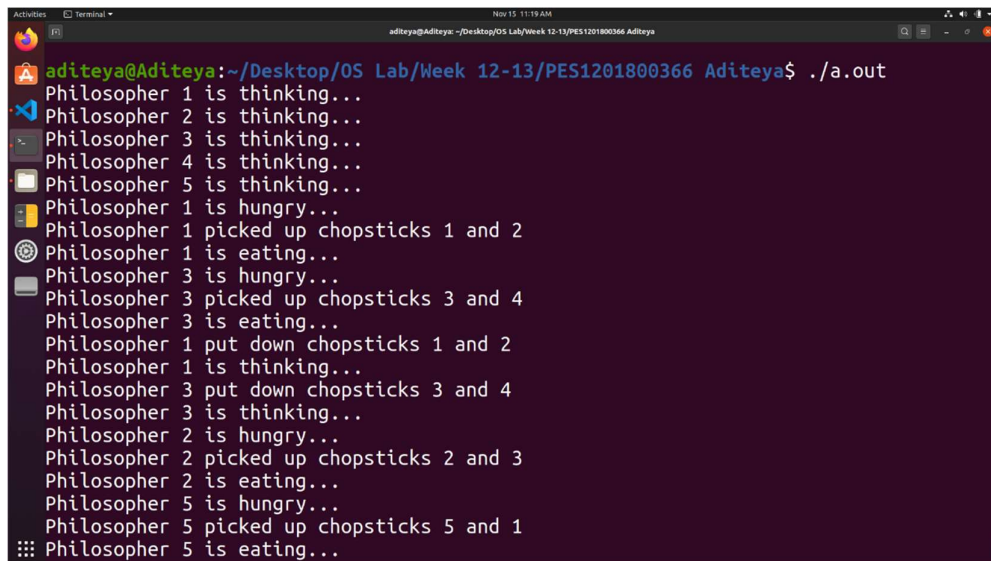
Synchronisation & Disk Management

PES1201800366

Aditeya Baral

1. Week 12

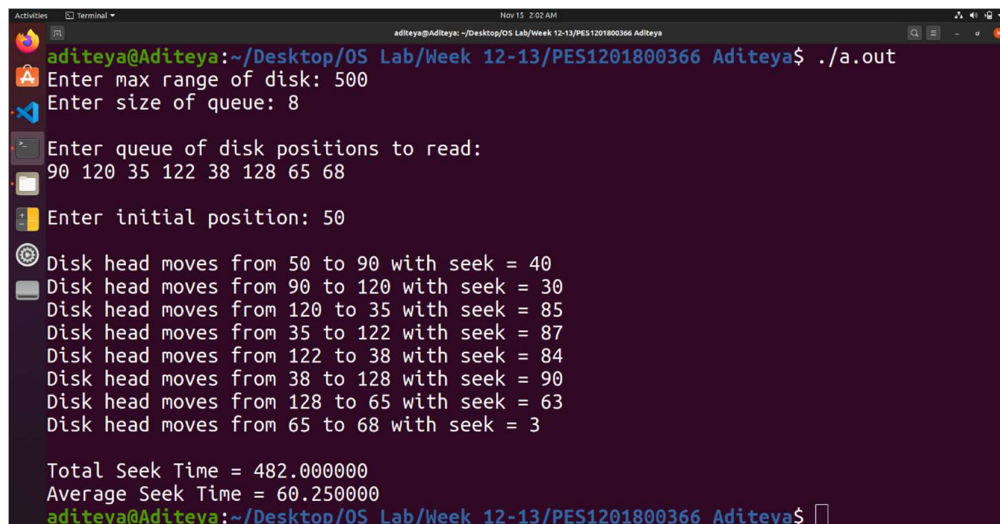
Write a C program to implement the solution to Dining-Philosophers problem.



```
aditeya@Aditeya:~/Desktop/OS Lab/Week 12-13/PES1201800366 Aditeya$ ./a.out
Philosopher 1 is thinking...
Philosopher 2 is thinking...
Philosopher 3 is thinking...
Philosopher 4 is thinking...
Philosopher 5 is thinking...
Philosopher 1 is hungry...
Philosopher 1 picked up chopsticks 1 and 2
Philosopher 1 is eating...
Philosopher 3 is hungry...
Philosopher 3 picked up chopsticks 3 and 4
Philosopher 3 is eating...
Philosopher 1 put down chopsticks 1 and 2
Philosopher 1 is thinking...
Philosopher 3 put down chopsticks 3 and 4
Philosopher 3 is thinking...
Philosopher 2 is hungry...
Philosopher 2 picked up chopsticks 2 and 3
Philosopher 2 is eating...
Philosopher 5 is hungry...
Philosopher 5 picked up chopsticks 5 and 1
Philosopher 5 is eating...
```

2. Week 13

Write a C program to implement FCFS disk scheduling.



```
aditeya@Aditeya:~/Desktop/OS Lab/Week 12-13/PES1201800366 Aditeya$ ./a.out
Enter max range of disk: 500
Enter size of queue: 8
Enter queue of disk positions to read:
90 120 35 122 38 128 65 68
Enter initial position: 50
Disk head moves from 50 to 90 with seek = 40
Disk head moves from 90 to 120 with seek = 30
Disk head moves from 120 to 35 with seek = 85
Disk head moves from 35 to 122 with seek = 87
Disk head moves from 122 to 38 with seek = 84
Disk head moves from 38 to 128 with seek = 90
Disk head moves from 128 to 65 with seek = 63
Disk head moves from 65 to 68 with seek = 3
Total Seek Time = 482.000000
Average Seek Time = 60.250000
aditeya@Aditeya:~/Desktop/OS Lab/Week 12-13/PES1201800366 Aditeya$
```