

OS Lab Report – Week 10 & 11

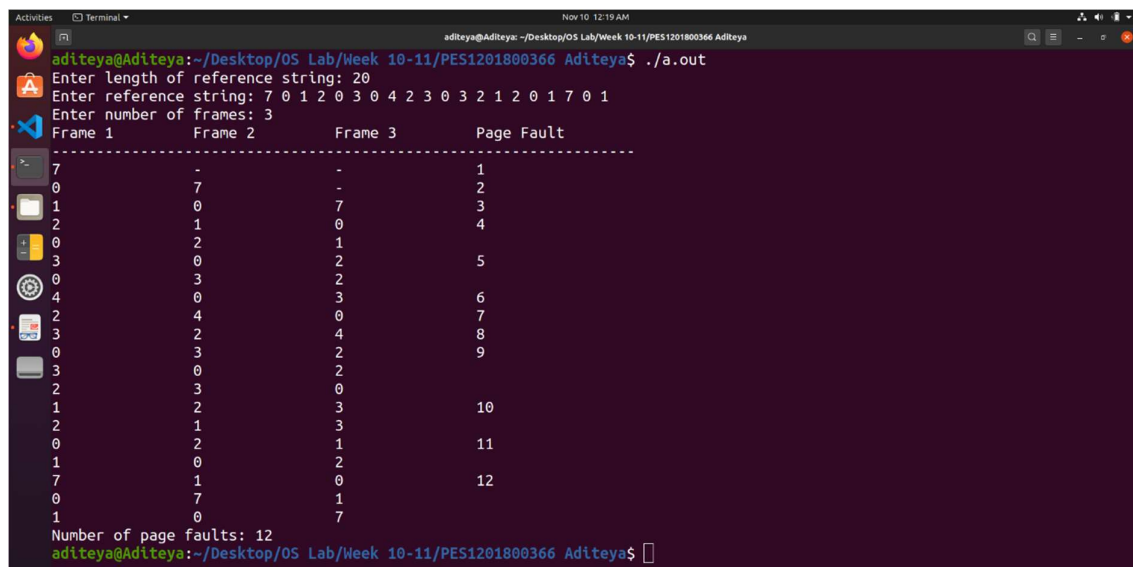
Memory Management Problems

PES1201800366

Aditeya Baral

1. Week 10

Write a C program to implement paging using Best-fit algorithm.



```
aditeya@Aditeya: ~/Desktop/OS Lab/Week 10-11/PES1201800366 Aditeya$ ./a.out
Enter length of reference string: 20
Enter reference string: 7 0 1 2 0 3 0 4 2 3 0 3 2 1 2 0 1 7 0 1
Enter number of frames: 3
Frame 1      Frame 2      Frame 3      Page Fault
-----
7            -            -            1
0            7            -            2
1            0            7            3
2            1            0            4
0            2            1            5
3            0            2            6
0            3            2            7
4            0            3            8
2            4            0            9
3            2            4            10
0            3            2            11
3            0            2            12
2            3            0
1            2            3
2            1            3
0            2            1
1            0            2
7            1            0
0            7            1
1            0            7
Number of page faults: 12
aditeya@Aditeya:~/Desktop/OS Lab/Week 10-11/PES1201800366 Aditeya$
```

2. Week 11

Write a C program to implement Least Recently Used page replacement (LRU) algorithm.

```
Activities Terminal Nov 10 9:59 AM
aditeya@Aditeya: ~/Desktop/OS Lab/Week 10-11/PES1201800366 Aditeya$ ./a.out
Enter number of partitions in memory: 4
Enter size of PARTITION 1: 300
Enter size of PARTITION 2: 100
Enter size of PARTITION 3: 200
Enter size of PARTITION 4: 400

Enter number of processes: 3
Enter name of process: P
Enter size of process P: 80

Enter name of process: Q
Enter size of process Q: 120

Enter name of process: R
Enter size of process R: 270

Partition Number      Partition Size      Partition Status      Fragment Size
-----
0                      300                Allocated (R)         30
1                      100                Allocated (P)         20
2                      200                Allocated (Q)         80
3                      400                Free                  400

aditeya@Aditeya:~/Desktop/OS Lab/Week 10-11/PES1201800366 Aditeya$
```