TRIBHUWAN UNIVERSITY

Hetauda City College

Hetauda-5

Operating System

Lab Report

(Fourth Semester, BSc. CSIT)

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Submitted To

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Output:

```
5 3
enter allocation matrix
0 1 0
2 0 0
3 0 2
2 1 1
0 0 2
enter the max matrix
7 5 3
3 2 2
9 0 2
4 2 2
5 3 3
enter the  available resource
3 3 2

 need resources matrix are
7       4       3
1       2       2
6       0       0
2       1       1
5       3       1

 available resource after completion
10      5       7
 safe sequence are
p1      p3      p4      p0      p2
Process returned 0 (0x0)   execution time : 40.128 s
Press any key to continue.
```

Output:

```
Enter number of disk requests: 6
Enter the disk requests:
43 23 12 98 34 67
Enter initial head position:
40
Enter disk size:
100
Enter direction (0 = left, 1 = right):
1

Seek Sequence:
43 67 98 99 34 23 12

Total Head Movement: 146

Process returned 0 (0x0)   execution time : 46.956 s
Press any key to continue.
```

Output:

```
Enter the number of Requests
6
Enter the Requests sequence
11 9 17 36 89 54
Enter initial head position
20
Total head movement is 91
Process returned 0 (0x0)   execution time : 31.009 s
Press any key to continue.
```

Output:

```
Enter the number of pages: 10
Enter the page numbers: 0 1 2 3 4 5 2 3 1 2
Enter the number of frames: 3

Page Replacement Process:
Page    Frames
0       0 - -
1       0 1 -
2       0 1 2
3       3 1 2
4       3 4 2
5       3 4 5
2       2 4 5
3       2 3 5
1       2 3 1
2       2 3 1

Total Page Faults: 9

Process returned 0 (0x0)   execution time : 24.912 s
Press any key to continue.
```

Output:

```
Enter the number of pages:
20
Enter the page numbers:
7 0 1 2 0 3 0 4 2 3 0 3 2 1 2 0 1 7 0 1
Enter the number of frames:
4

Page Replacement Process:
Page    Frames
7       7 - - -
0       7 0 - -
1       7 0 1 -
2       7 0 1 2
0       7 0 1 2
3       3 0 1 2
0       3 0 1 2
4       3 0 4 2
2       3 0 4 2
3       3 0 4 2
0       3 0 4 2
3       3 0 4 2
2       3 0 4 2
1       3 0 1 2
2       3 0 1 2
0       3 0 1 2
1       3 0 1 2
7       7 0 1 2
0       7 0 1 2
1       7 0 1 2

Total Page Faults: 8

Process returned 0 (0x0)   execution time : 43.970 s
```

Output:

```
Enter the number of processes: 3
Enter Burst Time for each process:
Process 1 Burst Time: 5
Process 2 Burst Time: 3
Process 3 Burst Time: 2

Process Burst Time      Waiting Time    Turnaround Time
------------------------------------------------
1       5               0               5
2       3               5               8
3       2               8               10

Average Waiting Time: 4.33
Average Turnaround Time: 7.67

Process returned 0 (0x0)   execution time : 7.410 s
Press any key to continue.
```

Output:

```
Enter the number of processes: 3
Enter Burst Time for each process:
Process 1 Burst Time: 5
Process 2 Burst Time: 4
Process 3 Burst Time: 6

Process Burst Time      Waiting Time    Turnaround Time
------------------------------------------------
1       5               8               13
2       4               6               10
3       6               9               15

Average Waiting Time: 7.67
Average Turnaround Time: 12.67

Process returned 0 (0x0)   execution time : 7.699 s
Press any key to continue.
```

Output:

```
Enter page size: 100
Enter number of pages: 4
Enter page table:
Page 0 -> Frame: 5
Page 1 -> Frame: 6
Page 2 -> Frame: 1
Page 3 -> Frame: 2
Enter logical address: 250

Logical Address: 250
Page Number: 2
Offset: 50
Frame Number: 1
Physical Address: 150

Process returned 0 (0x0)   execution time : 27.798 s
Press any key to continue.
```