

heroname@VILLAIN: ~/Desktop/school/351/proj 2/project 2 files

File Edit View Search Terminal Help

heroname@VILLAIN:~/Desktop/school/351/proj 2/project 2 files\$ g++ -o mm MemoryManager.cpp

heroname@VILLAIN:~/Desktop/school/351/proj 2/project 2 files\$./mm

Memory size (KB): 2000

Page Size (1:100, 2:200, 3:400): 2

Name of workload file: in1.txt

t = 0: Process 1 arrives

Input Queue: [1]

Process 2 arrives

Input Queue: [1 2]

MM moves Process 1 to memory

Input Queue: [2]

Memory Map:

0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame

MM moves Process 2 to memory

Input Queue: []

Memory Map:

0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame

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```
t = 100: Process 3 arrives
        Input Queue: [3]
Process 4 arrives
        Input Queue: [3 4]
        MM moves Process 3 to memory
        Input Queue: [4]
        Memory Map:
            0-199: Free Frame
            200-399: Free Frame
            400-599: Free Frame
            600-799: Free Frame
            800-999: Free Frame
            1000-1199: Free Frame
            1200-1399: Free Frame
            1400-1599: Free Frame
            1600-1799: Free Frame
            1800-1999: Free Frame
        MM moves Process 4 to memory
        Input Queue: []
        Memory Map:
            0-199: Free Frame
            200-399: Free Frame
            400-599: Free Frame
            600-799: Free Frame
            800-999: Free Frame
            1000-1199: Free Frame
            1200-1399: Free Frame
            1400-1599: Free Frame
            1600-1799: Free Frame
            1800-1999: Free Frame
t = 200: Process 5 arrives
        Input Queue: [5]
        MM moves Process 5 to memory
        Input Queue: []
        Memory Map:
            0-199: Free Frame
```

```
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame
```

t = 1000: Process 1 completes

Memory Map:

```
0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame
```

Process 3 completes

Memory Map:

```
0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame
```

Process 5 completes

Memory Map:

```
0-199: Free Frame
```

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```
0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame
```

t = 200: Process 5 arrives

Input Queue: [5]

MM moves Process 5 to memory

Input Queue: []

Memory Map:

```
0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame
```

t = 1000: Process 1 completes

Memory Map:

```
0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
```


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1800-1999: Free Frame

t = 1000: Process 1 completes

Memory Map:

0-199: Free Frame

200-399: Free Frame

400-599: Free Frame

600-799: Free Frame

800-999: Free Frame

1000-1199: Free Frame

1200-1399: Free Frame

1400-1599: Free Frame

1600-1799: Free Frame

1800-1999: Free Frame

Process 3 completes

Memory Map:

0-199: Free Frame

200-399: Free Frame

400-599: Free Frame

600-799: Free Frame

800-999: Free Frame

1000-1199: Free Frame

1200-1399: Free Frame

1400-1599: Free Frame

1600-1799: Free Frame

1800-1999: Free Frame

Process 5 completes

Memory Map:

0-199: Free Frame

200-399: Free Frame

400-599: Free Frame

600-799: Free Frame

800-999: Free Frame

1000-1199: Free Frame

1200-1399: Free Frame

1400-1599: Free Frame

1600-1799: Free Frame

```
1800-1999: Free Frame
t = 1200: Process 6 arrives
Input Queue: [6]
MM moves Process 6 to memory
Input Queue: []
Memory Map:
0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame
t = 1500: Process 7 arrives
Input Queue: [7]
MM moves Process 7 to memory
Input Queue: []
Memory Map:
0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame
t = 1600: Process 8 arrives
Input Queue: [8]
MM moves Process 8 to memory
Input Queue: []
Memory Map:
```

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```
0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame
```

t = 2000: Process 2 completes

Memory Map:

```
0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame
```

Process 4 completes

Memory Map:

```
0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame
```

Process 7 completes

Memory Map:

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```
0-199: Free Frame
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400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame
```

t = 2100: Process 8 completes

Memory Map:

```
0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame
```

t = 3000: Process 6 completes

Memory Map:

```
0-199: Free Frame
200-399: Free Frame
400-599: Free Frame
600-799: Free Frame
800-999: Free Frame
1000-1199: Free Frame
1200-1399: Free Frame
1400-1599: Free Frame
1600-1799: Free Frame
1800-1999: Free Frame
```

Average Turn Around Time: 1175