

# FIFO Simulation

## Start of Simulation

```
Please enter your selection: 4
Please enter the number of physical frames [1-7]: 4

-----
FIFO SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
-----
Physical Frame 0 | 2
-----
Physical Frame 1 |
-----
Physical Frame 2 |
-----
Physical Frame 3 |
-----
Page Faults | F
-----
Victim Frames |
-----

Total Number of Page Faults: 1
Press enter to continue...█
```

## Middle of Simulation

```
-----
FIFO SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
-----
Physical Frame 0 | 2 2 2 2 1 1 1 1 1
-----
Physical Frame 1 | 4 4 4 4 4 3 3 3
-----
Physical Frame 2 | 5 5 5 5 5 4 4
-----
Physical Frame 3 | 6 6 6 6 6 5
-----
Page Faults | F F F F F F F F
-----
Victim Frames | 2 4 5 6
-----

Total Number of Page Faults: 8
Press enter to continue...

-----
FIFO SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
-----
Physical Frame 0 | 2 2 2 2 1 1 1 1 1 2
-----
Physical Frame 1 | 4 4 4 4 4 3 3 3 3
-----
Physical Frame 2 | 5 5 5 5 5 4 4 4
-----
Physical Frame 3 | 6 6 6 6 6 5 5
-----
Page Faults | F F F F F F F F
-----
Victim Frames | 2 4 5 6 1
-----

Total Number of Page Faults: 9
Press enter to continue...█
```

## End of Simulation

```
-----
FIFO SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
-----
Physical Frame 0 | 2 2 2 2 1 1 1 1 1 2 2 2 2 2 2 7 7 7 7
-----
Physical Frame 1 | 4 4 4 4 4 3 3 3 3 3 6 6 6 6 6 6 5 5
-----
Physical Frame 2 | 5 5 5 5 5 4 4 4 4 4 4 3 3 3 3 3 6
-----
Physical Frame 3 | 6 6 6 6 6 5 5 5 5 5 5 4 4 4 4 4
-----
Page Faults | F F F F F F F F F F F F F F
-----
Victim Frames | 2 4 5 6 1 3 4 5 2 6 3
-----

Total Number of Page Faults: 15
```

# OPT Simulation

## Start of Simulation

```
Please enter your selection: 5
Please enter the number of physical frames [1-7]: 4

-----
OPT SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
Physical Frame 0 | 2
Physical Frame 1 |
Physical Frame 2 |
Physical Frame 3 |
-----
Page Faults | F
Victim Frames |
-----

Total Number of Page Faults: 1
Press enter to continue...
```

## Middle of Simulation

```
-----
OPT SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
Physical Frame 0 | 2 2 2 2 2 2 2 2 2
Physical Frame 1 | 4 4 4 4 4 4 4 4 4
Physical Frame 2 | 5 5 5 5 5 5 5
Physical Frame 3 | 6 1 1 3 3 3
-----
Page Faults | F F F F F F
Victim Frames | 6 1
-----

Total Number of Page Faults: 6
Press enter to continue...

-----
OPT SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
Physical Frame 0 | 2 2 2 2 2 2 2 2 2 2
Physical Frame 1 | 4 4 4 4 4 4 4 4 4 4
Physical Frame 2 | 5 5 5 5 5 5 5 5
Physical Frame 3 | 6 1 1 3 3 3 3
-----
Page Faults | F F F F F F
Victim Frames | 6 1
-----

Total Number of Page Faults: 6
Press enter to continue...
```

## End of Simulation

```
-----
OPT SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
Physical Frame 0 | 2 2 2 2 2 2 2 2 2 2 2 6 6 6 6 6 6 6 6
Physical Frame 1 | 4 4 4 4 4 4 4 4 4 4 4 4 4 4 7 7 7 7
Physical Frame 2 | 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Physical Frame 3 | 6 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
-----
Page Faults | F F F F F F F F F
Victim Frames | 6 1 2 4
-----

Total Number of Page Faults: 8
```

# LRU Simulation

## Start of Simulation

```
Please enter your selection: 6

Please enter the number of physical frames [1-7]: 4

-----
LRU SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
Physical Frame 0 | 2
Physical Frame 1 |
Physical Frame 2 |
Physical Frame 3 |
-----
Page Faults | F
Victim Frames |
-----

Total Number of Page Faults: 1

Press enter to continue...|
```

## Middle of Simulation

```
-----
LRU SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
Physical Frame 0 | 2 2 2 2 1 1 1 1 1
Physical Frame 1 | 4 4 4 4 4 3 3 3
Physical Frame 2 | 5 5 5 5 5 5 5
Physical Frame 3 | 6 6 6 6 4 4
-----
Page Faults | F F F F F F F
Victim Frames | 2 4 6
-----

Total Number of Page Faults: 7

Press enter to continue...|

-----
LRU SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
Physical Frame 0 | 2 2 2 2 1 1 1 1 1 2
Physical Frame 1 | 4 4 4 4 4 3 3 3 3
Physical Frame 2 | 5 5 5 5 5 5 5 5
Physical Frame 3 | 6 6 6 6 4 4 4
-----
Page Faults | F F F F F F F F
Victim Frames | 2 4 6 1
-----

Total Number of Page Faults: 8

Press enter to continue...|
```

## End of Simulation

```
-----
LRU SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
Physical Frame 0 | 2 2 2 2 1 1 1 1 1 2 2 2 2 2 4 4 4 4 6
Physical Frame 1 | 4 4 4 4 4 3 3 3 3 3 3 3 3 3 3 3 3 3
Physical Frame 2 | 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
Physical Frame 3 | 6 6 6 6 4 4 4 4 6 6 6 6 7 7 7 7
-----
Page Faults | F F F F F F F F F F F F
Victim Frames | 2 4 6 1 4 2 6 4
-----

Total Number of Page Faults: 12
```

# LFU Simulation

## Start of Simulation

```
Please enter your selection: 7
Please enter the number of physical frames [1-7]: 4

-----
LFU SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
-----
Physical Frame 0 | 2
-----
Physical Frame 1 |
-----
Physical Frame 2 |
-----
Physical Frame 3 |
-----
Page Faults | F
-----
Victim Frames |
-----

Total Number of Page Faults: 1
Press enter to continue... 
```

## Middle of Simulation

```
-----
LFU SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
-----
Physical Frame 0 | 2 2 2 2 1 1 3 3 3
-----
Physical Frame 1 | 4 4 4 4 4 4 4 4
-----
Physical Frame 2 | 5 5 5 5 5 5 5
-----
Physical Frame 3 | 6 6 6 6 6 6
-----
Page Faults | F F F F F F
-----
Victim Frames | 2 1
-----

Total Number of Page Faults: 6
Press enter to continue...

-----
LFU SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
-----
Physical Frame 0 | 2 2 2 2 1 1 3 3 3 2
-----
Physical Frame 1 | 4 4 4 4 4 4 4 4 4
-----
Physical Frame 2 | 5 5 5 5 5 5 5 5
-----
Physical Frame 3 | 6 6 6 6 6 6 6
-----
Page Faults | F F F F F F F
-----
Victim Frames | 2 1 3
-----

Total Number of Page Faults: 7
Press enter to continue... 
```

## End of Simulation

```
-----
LFU SIMULATION
Reference String | 2 4 5 6 1 5 3 4 5 2 3 6 5 3 4 7 3 5 6
-----
Physical Frame 0 | 2 2 2 2 1 1 3 3 3 2 3 3 3 3 7 3 3 3
-----
Physical Frame 1 | 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
-----
Physical Frame 2 | 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
-----
Physical Frame 3 | 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
-----
Page Faults | F F F F F F F F F F F F
-----
Victim Frames | 2 1 3 2 3 7
-----

Total Number of Page Faults: 10
```