

```
C:\Users\kondul\OneDrive\ID x + v
fd = 3
-----
Process exited after 0.07249 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\kondul\OneDrive\ID x + v
Enter the filename: MONI
File created successfully!
Enter data to write to the file: MONISHA
Reading data from the file:
MONISHA
Enter data to append to the file: MONI
Reading data from the file after appending:
MONISHA
MONI
-----
Process exited after 12.16 seconds with return value 0
Press any key to continue . . . |
```

```
C:\Users\kondur\OneDrive\ID x + -
Untitled19.exe
Untitled20.cpp
Untitled20.exe
Untitled21.cpp
Untitled21.exe
Untitled22.cpp
Untitled22.exe
Untitled23.cpp
Untitled23.exe
Untitled3.cpp
Untitled3.exe
Untitled4.cpp
Untitled4.exe
Untitled5.cpp
Untitled5.exe
Untitled6.cpp
Untitled6.exe
Untitled7.cpp
Untitled7.exe
Untitled8.cpp
Untitled8.exe
Untitled9.cpp
Untitled9.exe
Virtual Machines

-----
Process exited after 0.04058 seconds with return value 0
Press any key to continue . . . |
```

```
C:\Users\kondur\OneDrive\ID x + -
Usage: C:\Users\kondur\OneDrive\Documents\Untitled14.exe pattern filename

-----
Process exited after 0.04209 seconds with return value 1
Press any key to continue . . . |
```

```
C:\Users\kondur\OneDrive\ID x + v
Producer produced item: 21604
Consumer consumed item: 21603
Producer produced item: 21605
Consumer consumed item: 21604
Producer produced item: 21606
Consumer consumed item: 21605
Producer produced item: 21607
Consumer consumed item: 21606
Producer produced item: 21608
Consumer consumed item: 21607
Producer produced item: 21609
Consumer consumed item: 21608
Producer produced item: 21610
Consumer consumed item: 21609
Producer produced item: 21611
Consumer consumed item: 21610
Producer produced item: 21612
Consumer consumed item: 21611
Producer produced item: 21613
Consumer consumed item: 21612
Producer produced item: 21614
Consumer consumed item: 21613
Producer produced item: 21615
Consumer consumed item: 21614
Producer produced item: 21616
Consumer consumed item: 21615
Producer produced item: 21617
Consumer consumed item: 21616
Producer produced item: 21618
Consumer consumed item: 21617
Producer produced item: 21619
Consumer consumed item: 21618
Producer produced item: 21620
Consumer consumed item: 21619
Producer produced item: 21621
Consumer consumed item: 21620
Producer produced item: 21622
Consumer consumed item: 21621
Producer produced item: 21623
Consumer consumed item: 21622
Producer produced item: 21624
Consumer consumed item: 21623
Producer produced item: 21625
Consumer consumed item: 21624
Producer produced item: 21626
Consumer consumed item: 21625
```

```
C:\Users\kondur\OneDrive\ID x + v
Threads are not equal.
Hello from the thread!
Hello from the thread!
Main program exiting.

-----
Process exited after 0.00941 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\kondur\OneDrive\ID x + v
Simulating FIFO Page Replacement Algorithm

Access Page 1: Current Frames: 1
Access Page 2: Current Frames: 1 2
Access Page 4: Current Frames: 1 2 4
Access Page 0: Current Frames: 0 2 4
Access Page 4: Page already in memory
Current Frames: 0 2 4
Access Page 4: Page already in memory
Current Frames: 0 2 4
Access Page 3: Current Frames: 0 3 4
Access Page 3: Page already in memory
Current Frames: 0 3 4
Access Page 2: Current Frames: 0 3 2
Access Page 4: Current Frames: 4 3 2
Total Page Faults: 7

-----
Process exited after 0.09572 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\kondur\OneDrive\ID x + v
Page 1 -> 1 - -
Page 2 -> 1 2 -
Page 3 -> 1 2 3
Page 4 -> 4 2 3
Page 5 -> 4 5 3
Page 1 -> 4 5 1
Page 2 -> 2 5 1
Page 6 -> 2 6 1
Page 7 -> 2 6 7
Page 8 -> 8 6 7
Page 7 -> 8 6 7
Page 8 -> 8 6 7
Page 9 -> 8 9 7
Page 7 -> 8 9 7
Page 8 -> 8 9 7
Page 9 -> 8 9 7
Page 5 -> 8 9 5
Page 4 -> 4 9 5
Page 5 -> 4 9 5
Page 4 -> 4 9 5
Page 2 -> 4 2 5
Total page faults: 14

-----
Process exited after 0.04908 seconds with return value 0
Press any key to continue . . .
```