



```
// Group
45 printf("Group:\n");
46 if (access(filename, R_OK | W_OK) == 0) {
47     printf("  Read and write access granted\n");
48 } else {
49     printf("  Read and write access denied\n");
50 }
51
52 // Others
53 printf("Others:\n");
54 if (access(filename, R_OK) == 0) {
55     printf("  Read access granted\n");
56 } else {
57     printf("  Read access denied\n");
58 }
59
60 return 0;
61 }
62
```

```
cd "/Users/tharishkumar/Desktop/CURRENT SUB FILES/OPERATING SYSTEM/" && g++ 40Filelinux.cpp -o 40Filelinux && "/Users/tharishkumar/Desktop/CURRENT SUB FILES/OPERATING SYSTEM/" && g++ 40Filelinux.cpp -o 40Filelinux
tharishkumar@tharishs-MacBook-Air OPERATING SYSTEM % cd "/Users/tharishkumar/Desktop/CURRENT SUB FILES/OPERATING SYSTEM/" && g++ 40Filelinux.cpp -o 40Filelinux
ux && "/Users/tharishkumar/Desktop/CURRENT SUB FILES/OPERATING SYSTEM/" && g++ 40Filelinux.cpp -o 40Filelinux
40Filelinux.cpp:10:18: warning: conversion from string literal to 'char *' is deprecated [-Wc++11-compat-deprecated-writable-strings]
char *filename = "testfile.txt";
                   ^
40Filelinux.cpp:11:17: warning: conversion from string literal to 'char *' is deprecated [-Wc++11-compat-deprecated-writable-strings]
char *content = "Hello, world!\n";
                  ^
2 warnings generated.
Simulating different users accessing the file:
Owner:
  Read and write access granted
Group:
  Read and write access granted
Others:
  Read access granted
tharishkumar@tharishs-MacBook-Air OPERATING SYSTEM %
```







EXPLORER

OPEN EDITORS

OPERATING SYSTEM

25Unix

25Unix.c

26Filemanagement

26Filemanagement.c

27UnixCommand

27UnixCommand.c

28GREPUNIX.c

29GREPUNIX

29Synchronization

29Synchronization.c

30Thread

30Thread.c

31Memorymanagement

31Memorymanagement.c

32leastpage

32leastpage.c

33Optimalpage

33Optimalpage.c

34fileallocation.c

35indexblock

35indexblock.c

36linkedlist

36linkedlist.c

37Firstserverdisk

37Firstserverdisk.c

Bankeralgorithm

C:\Users\chait\Downloads\sse.txt

C:\Users\chait\OneDrive\Docume...

CPUSHEDULING

CPUSHEDULING.c

employees.dat

FILE

FILE.c

OUTLINE

TIMELINE

← →

OPERATING SYSTEM

C 32leastpage.c

C 33Optimalpage.c

C 34fileallocation.c

C 35indexblock.c

C 36linkedlist.c

C 37Firstserverdisk.c ×

C SMA ▶ ⚙️ □ ...

C 37Firstserverdisk.c > ...

23 // disk request queue

24

25 printf("Enter the disk request queue:\n");

26 for (int i = 0; i < n; i++) {

27 scanf("%d", &requestQueue[i]);

28 }

29

30 int initialHead; // Initial position of the head

31 printf("Enter the initial position of the head: ");

32 scanf("%d", &initialHead);

33

34 int totalHeadMovement = calculateHeadMovement(requestQueue, initialHead, n);

35

36 printf("Total head movement: %d\n", totalHeadMovement);

37

38 return 0;

39 }

40

41

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

SQL CONSOLE

Code + - □ □ ... ^ ×

cd "/Users/tharishkumar/Desktop/CURRENT SUB FILES/OPERATING SYSTEM/" && gcc 37Firstserverdisk.c -o 37Firstserverdisk && "/Users/tharishkumar/Desktop/CURRENT SUB FILES/OPERATING SYSTEM/" && gcc 37Firstserverdisk.c -o 37Firstserverdisk && "/Users/tharishkumar/Desktop/CURRENT SUB FILES/OPERATING SYSTEM/" && gcc 37Firstserverdisk.c -o 37Firstserverdisk

Enter the number of disk requests: 4

Enter the disk request queue:

1

2

34

5

Enter the initial position of the head: 1

Total head movement: 62

tharishkumar@tharishs-MacBook-Air OPERATING SYSTEM %

Spaces: 4

UTF-8

{ } C

Go Live

Mac





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Bankeralgorithm

C:\Users\chait\Downloads\sse.txt

C:\Users\chait\OneDrive\Docume...

CPUSHEDULING

CPUSHEDULING.c

employees.dat

FILE

FILE.c

FILE2

FILE2.c

fileallocation

HIGHESTPRIORITY

OUTLINE

TIMELINE

30Thread.c

31Memorymanagement.c

32leastpage.c

33Optimalpage.c

34fileallocation.c

35indexblock.c

SMAL

C 35indexblock.c > ...

19 void simulateFileAllocation(IndexBlock \*indexBlock) {

20 printf("Simulating file allocation strategy...\n");

21

22 // Reading blocks using index block pointers

23 for (int i = 0; i < indexBlock->numOfBlocks; i++) {

24 printf("Reading Block %d: %s\n", i + 1, indexBlock->blockPointers[i] == -1 ? "Empty" : "Data");

25 }

26 }

27

28 int main() {

29 IndexBlock indexBlock;

30 indexBlock.numOfBlocks = 0;

31

32 // Initialize block pointers to -1 (indicating empty)

33 for (int i = 0; i < MAX\_BLOCKS; i++) {

34 indexBlock.blockPointers[i] = -1;

35 }

36

37 printf("Enter the number of blocks in the file: ");

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

SQL CONSOLE

Code

cd "/Users/tharishkumar/Desktop/CURRENT SUB FILES/OPERATING SYSTEM/" && gcc 35indexblock.c -o 35indexblock

tharishkumar@tharishs-MacBook-Air OPERATING SYSTEM % cd "/Users/tharishkumar/Desktop/CURRENT SUB FILES/OPERATING SYSTEM/" && gcc 35indexblock.c -o 35indexblock

Enter the number of blocks in the file: 3

Simulating file allocation strategy...

Reading Block 1: Empty

Reading Block 2: Empty

Reading Block 3: Empty

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Ln 51, Col 1 Spaces: 4 UTF-8 LF {} C Go Live Mac





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33Optimalpage.c

Bankeralgorithm

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C:\Users\chait\OneDrive\Docume...

CPUSHEDULING

CPUSHEDULING.c

employees.dat

FILE

FILE.c

FILE2

FILE2.c

HIGHESTPRIORITY

HIGHESTPRIORITY.C

INTERPROCESS

INTERPROCESS.c

MSGQUEUE

OUTLINE

TIMELINE

33Optimalpage.c > ...

```
41 }
42 }
43
44 if (isPageFault) {
45     int index = optimalPage(pages, numOfPages, frames, numOfFrames, i + 1);
46     frames[index] = pages[i];
47     pageFaults++;
48 }
49 }
50
51 printf("Total Page Faults: %d\n", pageFaults);
52 }
53
54 int main() {
55     int numOfPages, numOfFrames;
56
57     printf("Enter the number of pages: ");
58     scanf("%d", &numOfPages);
59 }
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

SQL CONSOLE

Code

+

-

+

-

...

^

x

```
cd "/Users/tharishkumar/Desktop/CURRENT SUB FILES/OPERATING SYSTEM/" && gcc 330ptimalpage.c -o 330ptimalpage && "/Users/tharishkumar/Desktop/CURRENT SUB FILE
S/OPERATING SYSTEM/"330ptimalpage
tharishkumar@tharishs-MacBook-Air OPERATING SYSTEM % cd "/Users/tharishkumar/Desktop/CURRENT SUB FILES/OPERATING SYSTEM/" && gcc 330ptimalpage.c -o 330ptimal
page && "/Users/tharishkumar/Desktop/CURRENT SUB FILES/OPERATING SYSTEM/"330ptimalpage
Enter the number of pages: 4
Enter the number of frames: 3
Enter the sequence of page references:
4
5
6
7
Total Page Faults: 4
tharishkumar@tharishs-MacBook-Air OPERATING SYSTEM % 8
```

Spaces: 4 UTF-8 {} C Go Live Mac

