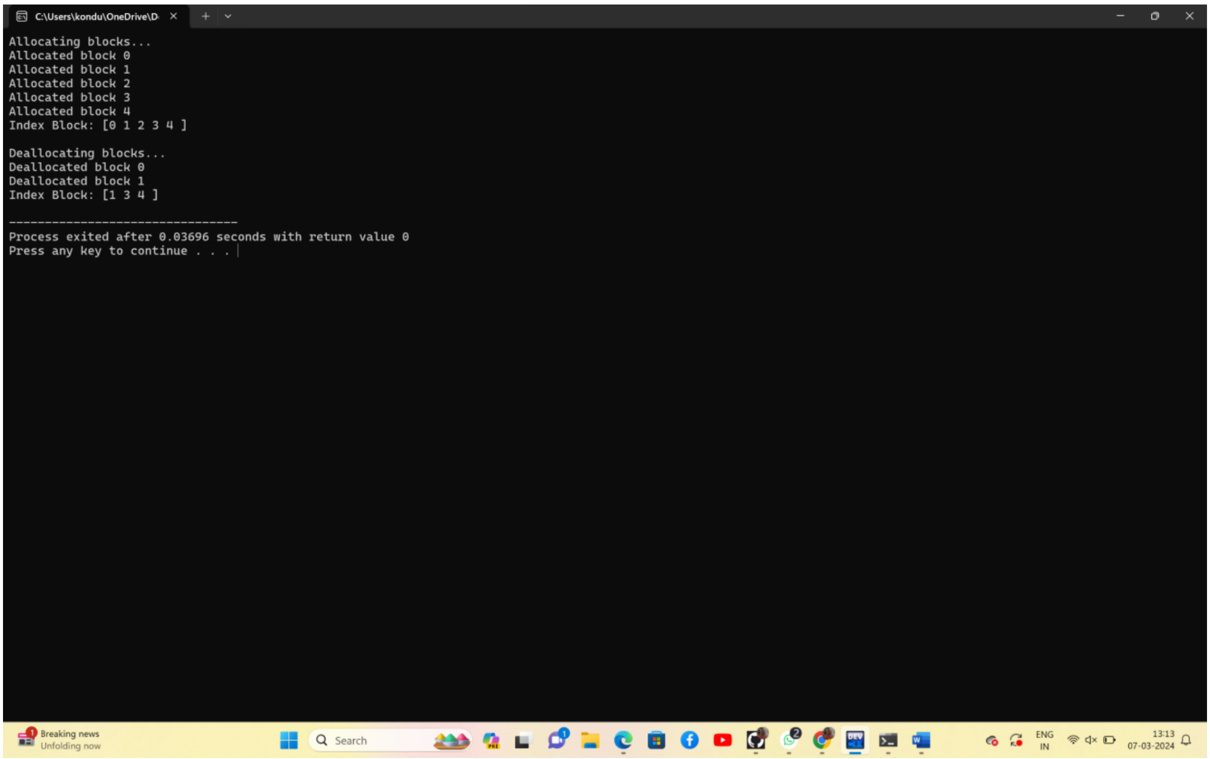
```
#include <stdio.h>
#include <stdlib.h>

#define MAX_BLOCKS 100

typedef struct {
    int index_block[MAX_BLOCKS];
    int num_blocks;
} FileSystem;

// Function to initialize the file system
void initialize(FileSystem *fs) {
    fs->num_blocks = 0;
    for (int i = 0; i < MAX_BLOCKS; i++) {
        fs->index_block[i] = -1;
    }
}

// Function to allocate a new block for a file
int allocateBlock(FileSystem *fs) {
    if (fs->num_blocks < MAX_BLOCKS) {
        fs->index_block[fs->num_blocks] = fs->num_blocks;
        fs->num_blocks++;
        return fs->num_blocks - 1;
    }
    return -1; // Allocation failed, no free blocks available
}

// Function to deallocate a block from a file
void deallocateBlock(FileSystem *fs, int block_number) {
    if (block_number >= 0 && block_number < fs->num_blocks) {
        fs->index_block[block_number] = -1;
        for (int i = block_number; i < fs->num_blocks - 1; i++) {
            fs->index_block[i] = fs->index_block[i + 1];
        }
        fs->num_blocks--;
    }
}

// Function to print the index block for a file
void printIndexBlock(FileSystem *fs) {
    printf("Index Block: [");
    for (int i = 0; i < fs->num_blocks; i++) {
        printf("%d ", fs->index_block[i]);
    }
    printf("]\n");
}

int main() {
    FileSystem fs;
    initialize(&fs);

    // Simulate file allocation
    printf("Allocating blocks...\n");
    for (int i = 0; i < 5; i++) {
        int block = allocateBlock(&fs);
        if (block != -1)
            printf("Allocated block %d\n", block);
        else
            printf("Allocation failed: No free blocks available\n");
    }
    printIndexBlock(&fs);
    // Simulate deallocation of blocks
    printf("\nDeallocating blocks...\n");
    for (int i = 0; i < 2; i++) {
        deallocateBlock(&fs, i);
        printf("Deallocated block %d\n", i);
    }
    printIndexBlock(&fs);

    return 0;
}
```



```
Allocating blocks...
Allocated block 0
Allocated block 1
Allocated block 2
Allocated block 3
Allocated block 4
Index Block: [0 1 2 3 4 ]

Deallocating blocks...
Deallocated block 0
Deallocated block 1
Index Block: [1 3 4 ]

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Process exited after 0.03696 seconds with return value 0
Press any key to continue . . .
```