```c
#include <stdio.h>
#include <stdlib.h>
struct Block {
    int blockNumber;
    char data[256];
};
int main() {
    FILE *file;
    struct Block block;
    int blockNumber;
    long indexBlock[100] = {0};
    file = fopen("indexed_file.bin", "wb");
    if (file == NULL) {
        printf("Error opening the file for writing.\n");
        return 1;
    }
    printf("Enter blocks (Enter '0' as block number to exit):\n");
    while (1) {
        printf("Block Number: ");
        scanf("%d", &block.blockNumber);
        if (block.blockNumber == 0) {
            break;
        }
        printf("Data: ");
        scanf(" %[^\n]", block.data)
        fwrite(&block, sizeof(struct Block), 1, file);
        indexBlock[block.blockNumber] = ftell(file) - sizeof(struct Block);
    }
    fclose(file);
    file = fopen("indexed_file.bin", "rb");
    if (file == NULL) {
        printf("Error opening the file for reading.\n");
        return 1;
    }
```

```c
    while (1) {
        printf("Enter the block number to read (0 to exit): ");
        scanf("%d", &blockNumber);
        if (blockNumber == 0) {
            break;
        }
        if (blockNumber < 0 || blockNumber >= 100 || indexBlock[blockNumber] == 0) {
            printf("Block %d not found.\n", blockNumber);
        } else {
            fseek(file, indexBlock[blockNumber], SEEK_SET);
            fread(&block, sizeof(struct Block), 1, file);
            printf("Block Number: %d\n", block.blockNumber);
            printf("Data: %s\n", block.data);
        }
    }
    fclose(file);
    return 0;
}
```

```
Enter blocks (Enter '0' as block number to exit):
Block Number: 17
Data: sandhiya
Block Number: 24
Data: moshi
Block Number: 44
Data: boomi
Block Number: 0
Enter the block number to read (0 to exit): 0

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Process exited after 50.93 seconds with return value 0
Press any key to continue . . . |
```