

SEQUENTIAL FILE ALLOCATION

```
#include <stdio.h>

int main() {
    int f[50], i, st, len, j, c;
    for (i = 0; i < 50; i++) {
        f[i] = 0;
    }
    do {
        printf("\nEnter the starting block and length of the file: ");
        scanf("%d%d", &st, &len);
        if (st + len > 50) {
            printf("Error: File size exceeds disk size!\n");
        } else {
            int freeBlocks = 1;
            for (j = st; j < (st + len); j++) {
                if (f[j] == 1) {
                    freeBlocks = 0;
                    break;
                }
            }
            if (freeBlocks == 1) {
                for (j = st; j < (st + len); j++) {
                    f[j] = 1;
                }
                printf("File allocated from block %d to %d\n", st, st + len - 1);
            } else {
                printf("Error: Some blocks are already allocated!\n");
            }
        }
    }
}
```

```
    printf("\nDo you want to enter more files? (1 = Yes / 0 = No): ");
    scanf("%d", &c);
} while (c == 1);
printf("\nFinal Disk Allocation (1 = allocated, 0 = free):\n");
for (i = 0; i < 50; i++) {
    printf("%d ", f[i]);
}
printf("\n");
return 0;
}
```