

CONTIGUOUS ALLOCATION

```
#include <stdio.h>

#include <stdlib.h>

#define MAX_BLOCKS 100

int main() {
    int start, length, i;

    int memory[MAX_BLOCKS] = {0}; // 0 = free, 1 = allocated

    printf("Enter starting block of file: ");
    scanf("%d", &start);

    printf("Enter length of file: ");
    scanf("%d", &length);

    if (start + length > MAX_BLOCKS) {
        printf("File cannot be allocated (out of memory range).\n");
        return 0;
    }

    for (i = start; i < start + length; i++) {
        if (memory[i] == 1) {
            printf("File cannot be allocated (blocks already in use).\n");
            return 0;
        }
    }

    for (i = start; i < start + length; i++) {
        memory[i] = 1;
    }

    printf("File allocated in blocks: ");

    for (i = start; i < start + length; i++) {
        printf("%d ", i);
```

```
}  
printf("\n");  
return 0;  
}
```