```c
#include <stdio.h>
void bestfit(int mp[], int p[], int m, int n) {
    int j = 0;
    for (int i = 0; i < m && j < n; i++) {
        if (mp[i] >= p[j]) {
            printf("\nProcess %d (%d KB) fits in Partition %d (%d KB)", j + 1, p[j], i + 1, mp[i]);
            mp[i] -= p[j];
            j++;
            i = -1;  } }
    for (int i = j; i < n; i++) {
        printf("\nProcess %d (%d KB) must wait (no suitable partition)", i + 1, p[i]);}}
void sortAsc(int a[], int n) {
    for (int i = 0; i < n - 1; i++) {
        for (int j = i + 1; j < n; j++) {
            if (a[i] > a[j]) {
                int t = a[i];
                a[i] = a[j];
                a[j] = t;}}}}
void sortDesc(int a[], int n) {
    for (int i = 0; i < n - 1; i++) {
        for (int j = i + 1; j < n; j++) {
            if (a[i] < a[j]) {
                int t = a[i];
                a[i] = a[j];
                a[j] = t;}}}}
```

```c
void firstfit(int mp[], int p[], int m, int n) {
    sortAsc(mp, m);
    bestfit(mp, p, m, n);}
void worstfit(int mp[], int p[], int m, int n) {
    sortDesc(mp, m);
    bestfit(mp, p, m, n);}
int main() {
    int m, n, mp[20], p[20], ch;
    printf("Number of memory partitions: ");
    scanf("%d", &m);
    printf("Number of processes: ");
    scanf("%d", &n);
    printf("Enter the memory partitions:\n");
    for (int i = 0; i < m; i++) {
        scanf("%d", &mp[i]);}
    printf("Enter process sizes:\n");
    for (int i = 0; i < n; i++) {
        scanf("%d", &p[i]);}
    printf("1. Best Fit\t2. First Fit\t3. Worst Fit\nEnter your choice: ");
    scanf("%d", &ch);
    switch (ch) {
        case 1: bestfit(mp, p, m, n); break;
        case 2: firstfit(mp, p, m, n); break;
        case 3: worstfit(mp, p, m, n); break;
        default: printf("Invalid choice"); break;}
    return 0;
}
```

```
Number of memory partitions: 4
Number of processes: 4
Enter the memory partitions:
250
300
750
900
Enter process sizes:
420
190
660
555
1. Best Fit     2. First Fit    3. Worst Fit
Enter your choice: 1

Process 1 (420 KB) fits in Partition 3 (750 KB)
Process 2 (190 KB) fits in Partition 1 (250 KB)
Process 3 (660 KB) fits in Partition 4 (900 KB)
Process 4 (555 KB) must wait (no suitable partition)
--------------------------------
Process exited after 75.01 seconds with return value 0
Press any key to continue . . .
```