

Experiment 13

```
1 #include <stdio.h>
2
3 void firstFit(int blockSize[], int m, int processSize[], int n) {
4     int allocation[n];
5     for (int i = 0; i < n; i++) allocation[i] = -1;
6     for (int i = 0; i < n; i++) {
7         for (int j = 0; j < m; j++) {
8             if (blockSize[j] >= processSize[i]) {
9                 allocation[i] = j;
10                blockSize[j] -= processSize[i];
11                break;
12            }
13        }
14    }
15    printf("\nProcess No\tProcess Size\tBlock No\n");
16    for (int i = 0; i < n; i++)
17        printf("%d\t%d\t%d\n", i+1, processSize[i], allocation[i] + 1);
18 }
19
20 int main() {
21     int blockSize[10], processSize[10];
22     int m, n;
23     printf("Enter number of memory blocks: ");
24     scanf("%d", &m);
25     printf("Enter block sizes: ");
26     for (int i = 0; i < m; i++) scanf("%d", &blockSize[i]);
27
28     printf("Enter number of processes: ");
29     scanf("%d", &n);
30     printf("Enter process sizes: ");
31     for (int i = 0; i < n; i++) scanf("%d", &processSize[i]);
32
33     firstFit(blockSize, m, processSize, n);
34
35     return 0;
36 }
```

```
Enter number of memory blocks: 5
Enter block sizes: 100 500 200 300 600
Enter number of processes: 4
Enter process sizes: 212 417 112 426

Process No      Process Size      Block No
1              212                  2
2              417                  5
3              112                  2
4              426                  0

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Process exited after 40.46 seconds with return value 0
Press any key to continue . . .
```