#include <stdio.h>

#define MAX 100

void bestFit(int blockSize[], int m, int processSize[], int n) {

int allocation[n];

for (int i = 0; i < n; i++)

allocation[i] = -1;

for (int i = 0; i < n; i++) {

int bestIdx = -1;

for (int j = 0; j < m; j++) {

if (blockSize[j] >= processSize[i]) {

if (bestIdx == -1) {

bestIdx = j;

} else if (blockSize[bestIdx] > blockSize[j]) {

bestIdx = j;

}

}

}

if (bestIdx != -1) {

allocation[i] = bestIdx;

blockSize[bestIdx] -= processSize[i];

}

}

printf("Process No.\tProcess Size\tBlock no.\n");

for (int i = 0; i < n; i++) {

printf("%d\t\t%d\t\t", i + 1, processSize[i]);

if (allocation[i] != -1) {

printf("%d\n", allocation[i] + 1);

} else {

printf("Not Allocated\n");

}

}

}

int main() {

int blockSize[] = {100, 500, 200, 300, 600};

int processSize[] = {212, 417, 112, 426};

int m = sizeof(blockSize) / sizeof(blockSize[0]);

int n = sizeof(processSize) / sizeof(processSize[0]);

bestFit(blockSize, m, processSize, n);

return 0;

}

