# 21. Develop a C program to implement worst fit algorithm of memory management.

#include <stdio.h>  
#define MAX 25  
  
int main() {  
 int frag[MAX], b[MAX], f[MAX], i, j, nb, nf, temp, highest = 0;  
 static int bf[MAX], ff[MAX];  
  
 printf("Enter number of blocks: ");  
 scanf("%d", &nb);  
 printf("Enter number of files: ");  
 scanf("%d", &nf);  
  
 printf("Enter size of each block:  
");  
 for(i = 0; i < nb; i++)  
 scanf("%d", &b[i]);  
  
 printf("Enter size of each file:  
");  
 for(i = 0; i < nf; i++)  
 scanf("%d", &f[i]);  
  
 for(i = 0; i < nf; i++) {  
 for(j = 0; j < nb; j++) {  
 if(bf[j] != 1) {  
 temp = b[j] - f[i];  
 if(temp >= 0)  
 if(highest < temp) {  
 ff[i] = j;  
 highest = temp;  
 }  
 }  
 }  
 frag[i] = b[ff[i]] - f[i];  
 bf[ff[i]] = 1;  
 highest = 0;  
 }  
  
 printf("\nFile No\tFile Size \tBlock No\tBlock Size\tFragment");  
 for(i = 0; i < nf; i++)  
 printf("\n%d\t\t%d\t\t%d\t\t%d\t\t%d", i+1, f[i], ff[i]+1, b[ff[i]], frag[i]);  
 return 0;  
}