

```
/* BEST FIT MEMORY ALLOCATION */

#include<stdio.h>
#define max 25

void main() {
    int frag[max],b[max],f[max],i,j,nb,nf,temp,lowest=10000;
    int bf[max],ff[max];
    printf("\n\t\tBEST FIT MEMORY ALLOCATION");
    printf("\n\t\t-----\n");
    printf("\n  Enter the number of blocks: ");
    scanf("%d",&nb);
    printf("\n  Enter the number of processes: ");
    scanf("%d",&nf);
    printf("\n  Enter the size of the blocks: ");
    for(i = 1;i <= nb;i++)
        scanf("%d",&b[i]);
    printf("\n  Enter the size of the processes: ");
    for(i=1;i<=nf;i++)
        scanf("%d",&f[i]);
    for(i = 1;i <= nf;i++) {
        for(j = 1;j <= nb;j++) {
            if(bf[j] != 1) {
                temp = b[j] - f[i];
                if(temp >= 0)
                    if(lowest > temp) {
                        ff[i]=j;
                        lowest=temp;
                    }
            }
        }
        frag[i]=lowest;
        bf[ff[i]]=1;
        lowest=10000;
    }

    printf("\n  Process No\tProcess Size\tBlock No\tBlock\nSize\tFragment");
    for(i=1;i<=nf && ff[i]!=0;i++)
        printf("\n\n%d\t%d\t%d\t%d\t%d",i,f[i],ff[i],b[ff[i]],frag[i]);
    printf("\n\n");
}
```