WORST-FIT

```
#include<stdio.h>
#include<conio.h>
#define max 25
void main()
{
int frag[max],b[max],f[max],i,j,nb,nf,temp,highest=0;
 static int bf[max],ff[max];
clrscr();

printf("\n\tMemory Management Scheme - Worst Fit");
 printf("\nEnter the number of blocks:");
 scanf("%d",&nb);
printf("Enter the number of files:");
scanf("%d",&nf);
printf("\nEnter the size of the blocks:-\n");
for(i=1;i<=nb;i++)
{
printf("Block %d:",i);
scanf("%d",&b[i]);
}
printf("Enter the size of the files :-\n");
for(i=1;i<=nf;i++)
{
printf("File %d:",i);
scanf("%d",&f[i]);
}
for(i=1;i<=nf;i++)
{


for(j=1;j<=nb;j++)
{
if(bf[j]!=1)    //if bf[j] is not allocated
{
temp=b[j]-f[i];
if(temp>=0)
if(highest<temp)
{
ff[i]=j;
highest=temp;

}
}
frag[i]=highest;
bf[ff[i]]=1;
 highest=0;
}
```

```
ff[i]=j;
highest=temp;
}

printf("\nFile_no:\tFile_size :\tBlock_no:\tBlock_size:\tFragement");
for(i=1;i<=nf;i++)
printf("\n%d\t\t%d\t\t%d\t\t%d\t\t%d",i,f[i],ff[i],b[ff[i]],frag[i]);
getch();
}
```

INPUT

Enter the number of blocks: 3 Enter the number of files: 2

Enter the size of the blocks:- Block 1: 5
Block 2: 2
Block 3: 7

Enter the size of the files:- File 1: 1
File 2: 4

OUTPUT

File No	File Size	Block No	Block Size	Fragment
1	1	3	7	6
2	4	1	5	1

FIRST-FIT:

```
#include<stdio.h>
#include<conio.h>
#define max 25
void main()
{
int frag[max],b[max],f[max],i,j,nb,nf,temp;
static int bf[max],ff[max];
clrscr();
printf("\n\tMemory Management Scheme - First Fit");
printf("\nEnter the number of blocks:");
scanf("%d",&nb);
printf("Enter the number of files:");
 scanf("%d",&nf);
printf("\nEnter the size of the blocks:-\n");
for(i=1;i<=nb;i++)
{
printf("Block %d:",i);
scanf("%d",&b[i]);
}
printf("Enter the size of the files :-\n");
for(i=1;i<=nf;i++)
{
printf("File %d:",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)
{
ff[i]=j;
break;
}
}
}
frag[i]=temp; bf[ff[i]]=1;
}
printf("\nFile_no:\tFile_size :\tBlock_no:\tBlock_size:\tFragement");
for(i=1;i<=nf;i++)
printf("\n%d\t\t%d\t\t%d\t\t%d\t\t%d",i,f[i],ff[i],b[ff[i]],frag[i];
getch();
```

```
}
```

INPUT

Enter the number of blocks: 3 Enter the number of files: 2
Enter the size of the blocks:- Block 1: 5
Block 2: 2
Block 3: 7
Enter the size of the files:- File 1: 1
File 2: 4

OUTPUT

File No	File Size	Block No	Block Size	Fragment
1	1	1	5	4
2	4	3	7	3

BEST-FIT

```
#include<stdio.h>
#include<conio.h>
#define max 25

void main()
{
int frag[max],b[max],f[max],i,j,nb,nf,temp,lowest=10000;
static int bf[max],ff[max];
clrscr();
printf("\n\tMemory Management Scheme – Best Fit");
printf("\nEnter the number of blocks:"); scanf("%d",&nb);
printf("Enter the number of files:"); scanf("%d",&nf);
printf("\nEnter the size of the blocks:-\n");
for(i=1;i<=nb;i++)
printf("Block %d:",i);
scanf("%d",&b[i]);

printf("Enter the size of the files :-\n");
 for(i=1;i<=nf;i++)
{
printf("File %d:",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("\nFile No\tFile Size \tBlock No\tBlock Size\tFragment");
for(i=1;i<=nf && ff[i]!=0;i++)
printf("\n%d\t\t%d\t\t%d\t\t%d\t\t%d",i,f[i],ff[i],b[ff[i]],frag[i]);
```

```
getch();
}
```

INPUT

Enter the number of blocks: 3 Enter the number of files: 2

Enter the size of the blocks:- Block 1: 5
Block 2: 2
Block 3: 7

Enter the size of the files:- File 1: 1
File 2: 4

OUTPUT

File No	File Size	Block No	Block Size	Fragment
1	1	2	2	1
2	4	1	5	1