FIRST FIT

Aim:

To write a C program for implementation memory allocation methods for fixed partition using first fit.

Algorithm:

1. Define the max as 25.
2. Declare the variable frag[max],b[max],f[max],i,j,nb,nf,temp, highest=0, bf[max],ff[max].
3. Get the number of blocks,files,size of the blocks using for loop.
4. In for loop check bf[j]!=1, if so temp=b[j]-f[i]
5. Check Highest

Program Code:

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

void main()
{
    int frag[max], b[max], f[max], i, j, nb, nf, temp;
    static int bf[max], ff[max];
    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:\tFragment");
    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]);
    }
}
```

Output:

Results:

Hence the C program to implement memory allocation methods for fixed partition using first fit has been successfully completed.