

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:

```
#include<stdio.h>
void main()
{
    int bsize[10], psize[10], bno, pno, flags[10], allocation[10], i, j;
    for(i = 0; i < 10; i++)
    {
        flags[i] = 0;
        allocation[i] = -1;
    }
    printf("Enter no. of blocks: ");
    scanf("%d", &bno);
    printf("\nEnter size of each block: ");
    for(i = 0; i < bno; i++)
        scanf("%d", &bsize[i]);
    printf("\nEnter no. of processes: ");
    scanf("%d", &pno);
    printf("\nEnter size of each process: ");
    for(i = 0; i < pno; i++)
        scanf("%d", &psize[i]);
    for(i = 0; i < pno; i++) //allocation as per first fit
        for(j = 0; j < bno; j++)
            if(flags[j] == 0 && bsize[j] >= psize[i])
            {
                allocation[j] = i;
```

```
        flags[j] = 1;
        break;
    }
    printf("\nBlock no.\tsize\t\tprocess no.\t\tsize");
    for(i = 0; i < bno; i++)
    {
        printf("\n%d\t\t%d\t\t", i+1, bsize[i]);
        if(flags[i] == 1)
            printf("%d\t\t\t%d", allocation[i]+1, psize[allocation[i]]);
        else
            printf("Not allocated");
    }
}
```