

Ex. No.: 10b)

Date: 11-4-25

FIRST FIT

Aim:

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 $bf[j] \neq 1$, if so $temp = b[j] - f[i]$
 - 5: Check highest

Program Code:

```

#include <stdio.h>
void firstFit (int blocksize[], int blockcount, int processsize[])
    int processcount) { int allocation [processcount]}

    for (int i=0; i<processcount; i++) {
        allocation [i] = -1;
        for (int j=0; j< blockcount ; j++) {
            if (blocksize[j] >= processsize[i]) {
                allocation [i] = j+1;
                blocksize [j] = processsize[i];
                break;
            }
        }
    }

    printf("Process No. process size Block No. \n");
    for (int i=0; i<processcount; i++) {
        if (allocation [i] != -1)
            printf("%d %d %d \n", i+1, processsize[i], allocation[i]);
    }
}

```

else
 printf(").d).d Not allocated ("n", i+1, process
 size[i]);

}

```
int main() {  
    int blockCount, processCount;  
    printf("Enter the no. of memory blocks : ");  
    scanf("%d", &blockCount);  
    int blockSize[blockCount];  
    printf("Enter the sizes of %d memory blocks : ", blockCount);  
    for (int i=0; i< blockCount; i++) {  
        scanf("%d", &blockSize[i]);  
    }  
    printf("Enter the no. of process : ");  
    scanf("%d", &processCount);  
    int processSize[processCount];  
    printf("Enter the sizes of %d processes : ", processCount);  
    for (int i=0; i< processCount; i++) {  
        scanf("%d", &processSize[i]);  
    }  
    firstFit(blockSize, blockCount, processSize, processCount);  
    return 0;
```

}

OUTPUT:

Enter the no. of memory blocks : 8

Enter the sizes of 8 memory blocks : 5

1

2

Enter the no. of processes : 3

Enter the sizes of 3 processes : 4

5

3

Process No.

Process size

Block No.

1

4

1

Not allocated

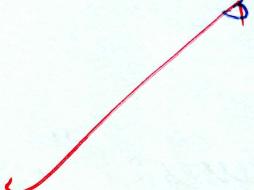
2

5

Not allocated

3

3



Sample Output:

```
Enter the number of blocks:4  
Enter the number of files:3
```

```
Enter the size of the blocks:-
```

```
Block 1:5
```

```
Block 2:8
```

```
Block 3:4
```

```
Block 4:10
```

```
Enter the size of the files:-
```

```
File 1:1
```

```
File 2:4
```

```
File 3:7
```

| File_no: | File_size : | Block_no: | Block_size: | Fragment |
|----------|-------------|-----------|-------------|----------|
| 1 | 1 | 1 | 5 | 4 |
| 2 | 4 | 2 | 8 | 4 |
| 3 | 7 | 4 | 10 | 3 |

Q8t

Result:

Thus the above program to write a C program for implementation memory allocation methods for fixed partition using first fit has been executed successfully.