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Exp:10b   **First Fit**

Aim:

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

CODE:

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

int 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;
                    frag[i] = temp;
                    bf[j] = 1;
                    break;
                }
            }
        }
    }

    printf("\nFile_no:\tFile_size:\tBlock_no:\tBlock_size:\tFragment");
    for (i = 1; i <= nf; i++)
"firstfit.c" 57L, 1188C
```

```
    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]);
    }

    return 0;
}
```

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
```