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Subject - Operating System

Ans 1 →

```
#include <stdio.h>

int main()
{
    int fragments[10], blocks[10], files[10];
    int m, n, number_of_blocks, number_of_files, temp, top=0;
    static int block_arr[10], file_arr[10];
    printf("\n Enter the total Number of blocks:\t");
    scanf("%d", &number_of_blocks);
    printf("Enter the Total Number of Files:\t");
    scanf("%d", &number_of_files);
    printf("\n Enter the Size of the Blocks:\n");
    for (m = 0; m < number_of_blocks; m++)
    {
        printf("Block No. [%d]:\t", m+1);
        scanf("%d", &blocks[m]);
    }
    printf("Enter the Size of the Files:\n");
    for (m = 0; m < number_of_files; m++)
    {
        printf("File No. [%d]:\t", m+1);
        scanf("%d", &files[m]);
    }
}
```



```

for (m = 0; m < number_of_files; m++)
{
    for (n = 0; n < number_of_blocks; n++)
    {
        if (block_arr[n] != 1)
        {
            temp = blocks[n] - files[m];
            if (temp >= 0)
            {
                if (top < temp)
                {
                    file_arr[m] = n;
                    top = temp;
                }
            }
        }
    }
    fragments[m] = top;
    block_arr[file_arr[m]] = 1;
    top = 0;
}
}

```

Ans.



```
printf (" \n File Number \t File Size \t Block Number \t Block  
Size \t Fragment ");
```

```
for ( m = 0 ; m < number - of - files ; m ++ )
```

```
{
```

```
printf (" \n File
```

```
printf (" \n %d \t %d \t %d \t %d \t %d \t %d",  
m, files[m], file - arr[m], blocks[file - arr  
[m]], fragments[m]);
```

```
}
```

```
printf (" \n ");
```

```
return 0;
```

```
}
```

Preji



```

Enter the Total Number of Blocks:      3
Enter the Total Number of Files:      2

Enter the Size of the Blocks:
Block No.[1]:  5
Block No.[2]:  2
Block No.[3]:  7
Enter the Size of the Files:
File No.[1]:   1
File No.[2]:   4

File Number   File Size   Block Number   Block Size   Fragment
0             1          2              7            6
1             4          0              5            0

...Program finished with exit code 0
Press ENTER to exit console.
```