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Subject - operating system and its practical

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Q1 Write a C program code for worst fit memory management scheme.

```
#include <stdio.h>
```

```
int main()
```

```
printf("\n\t\t\t\t\tMemory Management\n\t\t\t\t\tScheme - Worst Fit");
```

```
int i, j, nblocks, nfiles, temp, top = 0;
```

```
int frag[10], blocks[10], files[10];
```

```
static int block-arr[10], file-arr[10];
```

```
printf("\nEnter the Number\nof Blocks:");
```

```
scanf("%d", &nblocks);
```

```
printf("Enter the Number\nof Files:");
```

```
scanf("%d", &nfiles);
```

```
printf("\nEnter the Size of the\nBlocks: \n");
```

```
for (i = 0; i < nblocks; i++)
```

```
{ printf("Enter Block %d: ", i+1);
```

```
scanf("%d", &blocks[i]);
```

```
}
```

```
printf("Enter the size of the\nFiles: \n");
```


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```
for (i=0; i<nfiles; i++)
```

```
{
```

```
    printf("file %d: \n", i+1);
```

```
    scanf("%d", &files[i]);
```

```
}
```

```
for (i=0; i<nfiles; i++)
```

```
{
```

```
    for (j=0; j<nblocks; j++)
```

```
    { if (blocks_arr[j] = 1)
```

```
    {
```

```
        temp = block[j] - files[i];
```

```
        if (temp >= 0)
```

```
        { if (top < temp)
```

```
        { file_arr[i] = j;
```

```
          top = temp;
```

```
        }
```

```
    }
```

```
    }
```

```
    file_arr[i] = top;
```

```
    block_arr[file_arr[i]] = 1;
```

```
    top = 0;
```

```
}
```

```
printf("\nfile Number | file size |
```

```
      "Block Number | block size | seg  
      ment");
```


For($i=0; i < n(\text{files}); i++$)

Distabsh

{

printf("\n%.d | t | %.d | t | t | %.d | t | t | %.d | t | t | %.d |
i, files[i], file-arr[i], blockIfile-arr
[i], frag[i]);

}

printf("\n");

return 0;

}

Memory Management Scheme - Worst Fit

Enter the Number of Blocks: 3

Enter the Number of Files: 2

Enter the Size of the Blocks:

Block 1: 5

Block 2: 2

Block 3: 7

Enter the Size of the Files:

File 1: 1

File 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.