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Course :- BSC IT

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Q1. First fit algorithm.

```
#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++)
        for (j=0; j<bno; j++)
```

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```

if (flags[j] == 0 && bsize[j] >= psize[i]) ②
{
    allocation[j] = i;
    flags[j] = i;
    break;
}
printf("\n block no.\tsize\t\tprocess no.\t\tsize");
for (i = 0; i < bno; i++)
{
    printf("\n %d\t\t\t%d\t\t\t", i+1, bsize[i]);
    if (flags[i] == 1)
        printf("\t\t\t%d", allocation[i]+1, psize[allocation[i]]);
    else
        printf("\t\t\tNot allocated");
}
}

```

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```
PS C:\Users\hp\c programming> cd "c:\Users\hp\c programming\operating system\" ; if ($?) { gcc first_fit_algo.c -o first_fit_algo } ; if ($?) { .\first_fit_algo }
Enter no. of blocks: 3
```

```
Enter size of each block: 12
10
6
```

```
Enter no. of processes: 3
```

```
Enter size of each process: 6
5
4
```

Block no.	size	process no.	size
1	12	1	6
2	10	2	5
3	6	3	4

```
PS C:\Users\hp\c programming\operating system> |
```