

Operating System

```
Q-1 #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 ("\n Enter size of each block: ");
    for (i = 0; i < bno; i++)
        scanf ("%d", &bsize [i]);
    printf ("\n Enter no. of processes: ");
    scanf ("%d", &pno);
    for (i = 0; i < pno; i++) // allocation as per
        first fit
        for (j = 0; j < bno; j++)

            if (flags [j] == 0 && bsize [j] >= psize [i])
            {
```

```
allocation [j] = i;
```

```
flags [j] = 1;
```

```
break;
```

```
{
```

```
// display allocation details
```

```
printf("\n Block no. | tsize | tprocess no. |  
      | tsize");
```

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

```
{
```

```
printf("\n %d | t | t %d | t | t", i+1, bsize[i],
```

```
if (flags[i] == 1)
```

```
printf("%d | t | t | t %d", allocation[i]  
+ 1, psize[allocation[i]]);
```

```
else
```

```
printf("Not allocated");
```

```
{
```

```
}
```

Enter no. of blocks: