

<u>Code</u>	<u>Output</u>
<pre> #include <stdio.h> #define max 20 void main() { int s[max],i,h,n,t=0,f[max],j=0; printf("Enter the total no. of request :"); scanf("%d",&n); printf("Enter requests :"); for(i=0;i<n;i++) { scanf("%d",&s[i]); } printf("Enter head request :"); scanf("%d",&h); printf("FCFS disk scheduling>>"); for(i=0;i<n;i++) { f[0]=h; f[i+1]=s[i]; } for(i=0;i<=n;i++) { printf("%d ",f[i]); } for(i=0;i<n;i++) { if(f[i+1]<f[i]) { j=f[i]-f[i+1]; } else { j=f[i+1]-f[i]; } t=t+j; } printf("\nTotal seek time : %d",t); } </pre>	<pre> Enter the total no. of request :8 Enter requests :98 183 37 122 14 124 65 67 Enter head request :53 FCFS disk scheduling>>53 98 183 37 122 14 124 65 67 Total seek time : 640 </pre>

FCFS

Code	Output
<pre> #include <stdio.h> #define max 20 void main() { int n, hp, p[max], seekt=0, i, j, rq[max], t=0, temp, d, a; printf("Enter the total no. of request :"); scanf("%d", &n); printf("Enter requests :"); for(i=0; i<n; i++) { scanf("%d", &p[i]); } printf("Enter head position :"); scanf("%d", &hp); p[n]=hp; printf("Enter the no of disks :"); scanf("%d", &d); p[n+1]=d-1; for(i=0; i<=n; i++) { for(j=i+1; j<=n+1; j++) { if(p[i]>p[j]) { temp=p[i]; p[i]=p[j]; p[j]=temp; } } } for(i=0; i<=n; i++) { if(p[i]==hp) t=i; } printf("The SCAN scheduling >>\n"); for(i=t; i<=n; i++) printf("%d\t", p[i]); for(i=t-1; i>=0; i--) printf("%d\t", p[i]); seekt=(p[n+1] - p[t])+(p[n+1] - p[0]); printf("\nTotal seek time : %d\n", seekt); } </pre>	<pre> Enter the total no. of request :8 Enter requests :98 183 37 122 14 124 65 67 Enter head position :53 Enter the no of disks :200 The SCAN scheduling >> 53 65 67 98 122 124 183 37 14 Total seek time : 331 </pre>

SCAN

Code

```
#include <stdio.h>
#define max 20
void main()
{
    int n, hp, p[max], seekt=0, i, j, rq[max], t=0, temp, d, a;
    printf("Enter the total no. of request :");
    scanf("%d", &n);
    printf("Enter requests :");
    for(i=0; i<n; i++)
    {
        scanf("%d", &p[i]);
    }
    printf("Enter head position :");
    scanf("%d", &hp);
    p[n]=hp;
    printf("Enter the no of disks :");
    scanf("%d", &d);
    p[n+1]=d-1;

    for(i=0; i<=n; i++)
    {
        for(j=i+1; j<=n+1; j++)
        {
            if(p[i]>p[j])
            {
                temp=p[i];
                p[i]=p[j];
                p[j]=temp;
            }
        }
    }
    for(i=0; i<=n; i++)
    {
        if(p[i]==hp)
            t=i;
    }
    printf("The SCAN scheduling >>\n");
    for(i=t; i<=n; i++)
        printf("%d\t", p[i]);
    printf("0-->");
    for(i=0; i<=t-1; i++)
    {
        printf("%d\t", p[i]);
        a=i;
    }
    seekt=(p[n+1] - p[t])+p[n+1]+p[t-1];
    printf("\nTotal seek time : %d\n", seekt);
}
```

Output

```
Enter the total no. of request :8
Enter requests :98
183
37
122
14
124
65
67
Enter head position :53
Enter the no of disks :200
The SCAN scheduling >>
53    65    67    98    122
124   183   0-->14   37
Total seek time : 382
```

C-SCAN