# GRAPHIC ERA HILL UNNERSITY

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Subject - operating System Lab

Code :-

```
#include <stdio.h>
int absvalue(int);
void main()
{
 int queue[25], n, head, i, j, k, seek=0, maxrange;
 int difference, temp, queue1[20], queue2[20], tmp1=0, tmp2=0;
 Printf("Enter the max. range of Disk:");
 Scanf("%d", &maxrange);
Printf("Enter the no. of queue request");
Scanf("%d", &n);
Printf("Enter the initial head position");
Scanf("%d", &head);
Printf("Enter the disk position to be read:");
 for(j=1; j<=n; j++)
{
 Scanf("%d", &tmp);
 if(tmp > head)
 { queue1[tmp1] = tmp;
   tmp1++;
```

Yashar

```
else
{
  queue2[tmp2] = tmp;
  tmp2++;
 }
}
for(i=0; i<tmp1-1; i++) {
      for(j=i+1; j<tmp1; j++) {
          if(queue1[i] > que[j]) {
            tmp = queue1[i];
            queue[i] = queue1[j];
            queue[j] = tmp;
          }
      }
  }
  for(i=0; i<tmp2-1; i++) {
    for(j=i+1; j<tmp2; j++) {
       if(queue2[i] < queue2[j]) {
          tmp = queue2[i];
          queue2[i] = queue2[j];
          queue2[j] = tmp;
       }
    }
  }
  for(i=1, j=0; j<tmp1; i++, j++)
  {
    queue[j] = queue1[j];
  }
```

Visitor

```
queue[i] = rearrange;
for (j = tmp1+2, j = 0; j<tmp2; j++, j++) {
    queue[j] = queue2[j];
}
queue[i] = 0;
queue[0] = head;
for (j = 0; j<=n; j++) {
    difference = absvalue(queue[j+1] - queue[j]);
    seek = seek + difference;
}
printf("Total head movement = %d \n", seek);
}
int absvalue(int x)
{
if (x > 0)
{
return x;
}
else
{
return x*-1;
}
}
```

```
C:\Users\ASUS>cd "C:\Users\ASUS\AppData\Local\Temp\" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "C:\Users\ASUS\AppData\Local\Temp\"tempCodeRunnerFile
Enter the maximum range of Disk: 100
Enter the number of queue requests: 7
Enter the initial head position: 24
Enter the disk positions to be read(queue): 12
26
24
4
42
8
50
Total head movement= 172
```