Name - Harsh Rawat
University roll no - 2023057
Student ID - 20131036
Sub Name - Operating System
Sub Code - PBI-202

Course - BSC IT
SEC - A
SEM - 2

Ans-2

Code

```
# include <stdio.h>
    int absolute Value (int);
        Void main ()

{
int queue [25] , n, Head position, i, j, k, seek = 0;
maxrange,
difference, temp. queue [20] , queue 2 [20], temp 1 = 0
        temp 2 = 0;
        float average seek Time;
printf(" Enter the maximum range of Disk: ");
Scanf ("%d", & max range);
printf (" Enter the Number of queue requests. ");
Scanf ("%d", & n);
printf ( " Enter the intial Head position. ");
Scanf("%d", & Head position);
printf (" Enter the Disk positions to be read (queue): ");
    for (i=1; i<=n; i++)

{
```

DATE. 27/8/21

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```
Scanf ("%d", &temp);
 if (temp > Head position)
 {
  queue 1[i temp 1] = temp;
  temp i++;
 } else
 } queue 2 [ temp 2] = temp;
     temp 2 ++;

  }
 }
  for (i=0; i < temp 1-1; i++)
  { for(j=j+1; j < temp 1; j++)
  { if (queue 1[i] < queue 1[i])
  {  temp = queue 1[i];
     queue 1[i] = queue 1[i];
      queue [i] = temp;

  }
  }
  }
 for (i=1 j=0; j < temp 1; i++-1, j++)
 { queue [i]- queue [i];
 { queue [i] = maxrange;
```

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```
for (i=temp 1+1 j=0 ; j <temp 2 : j++)
{
  queue [i] = queue 2 [i];
{
  queue [i] = 0;
  queue [0] = headposition;
  for (j=0 ; j <=n ; j++)
  {
  difference = absolute value (queue [j+1] - queue [i]);
  seek = seek + difference;
  printf (" Disk head moves from position %d to %d
    With seek %d \n")
  queue [i]. queue [j+1]. difference);
  {
  average Seek Time = seek / (float) 9 n;
  printf (" Total seek Time = %d \n", seek);
  printf (" Average Seek Time = %f \n", average Seek Time);
}
int absolute value (int x)
{
  if (x>0)
  {
  return x;
  }
  else
  return x -1;
  }
}
```

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```
Enter the number of Requests
7
Enter the Requests sequence
12
26
24
4
42
8
50
Enter initial head position
24
Enter total disk size
100
Total head movement is 170
PS C:\Users\hp\c programming\operating system>
```