C:\Users\aswin\Documents\scandisk.c - Embarcadero Dev-C++ 6.3

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TDM-GCC 9.2.0 64-bit Release

(globals)

Project C

firstfitos.c | FCFSDISKOS.C | scandisk.c

```c
#include<stdio.h>
int absoluteValue(int);
void main()
{
    int queue[25],n,headposition,i,j,k,seek=0, maxrange,
    difference,temp,queue1[20],queue2[20],temp1=0,temp2=0;
    printf("Enter the maximum range of Disk: ");
    scanf("%d",&maxrange);
    printf("Enter the number of queue requests: ");
    scanf("%d",&n);
    printf("Enter the initial head position: ");
    scanf("%d",&headposition);
    printf("Enter the disk positions to be read(queue): ");
    for(i=1;i<=n;i++)
    {
        scanf("%d",&temp);
        if(temp>headposition)
        {
            queue1[temp1]=temp;
            temp1++;
        }
        else
        {
            queue2[temp2]=temp;
            temp2++;
        }
    }
   for(i=0;i<temp1-1;i++)
    {
       for(j=i+1;j<temp1;j++)
```

```
    {
        if(queue1[i]>queue1[j])
        {
            temp=queue1[i];
            queue1[i]=queue1[j];
            queue1[j]=temp;
        }
    }
}
for(i=0;i<temp2-1;i++)
{
    for(j=i+1;j<temp2;j++)
    {
        if(queue2[i]<queue2[j])
        {
            temp=queue2[i];
            queue2[i]=queue2[j];
            queue2[j]=temp;
        }
    }
}
for(i=1,j=0;j<temp1;i++,j++)
{
    queue[i]=queue1[j];
}
queue[i]=maxrange;
for(i=temp1+2,j=0;j<temp2;i++,j++)
{
    queue[i]=queue2[j];
}
```

```
    queue[i]=0;
    queue[0]=headposition;
    for(j=0; j<=n; j++)
    {
        difference = absoluteValue(queue[j+1]-queue[j]);
        seek = seek + difference;
        printf("Disk head moves from position %d to %d with Seek %d \n",
        queue[j], queue[j+1], difference);
    }
    printf("Total Seek Time= %d\n", seek);
}
int absoluteValue(int x)
{
    if(x>0)
    {
        return x;
    }
    else
    {
        return x*-1;
    }
}
```

Compiler | Resources | Compile Log | Debug | Find Results | Console

Line: 1 Col: 1 Sel: 0 Lines: 82 Length: 1946 Insert Done parsing in 0 seconds

C:\Users\aswin\Documents\scandisk.exe

```
Enter the maximum range of Disk: 199
Enter the number of queue requests: 6
Enter the initial head position: 13 54 76 99 108 185
Enter the disk positions to be read(queue): 63
Disk head moves from position 13 to 54 with Seek 41
Disk head moves from position 54 to 63 with Seek 9
Disk head moves from position 63 to 76 with Seek 13
Disk head moves from position 76 to 99 with Seek 23
Disk head moves from position 99 to 108 with Seek 9
Disk head moves from position 108 to 185 with Seek 77
Disk head moves from position 185 to 199 with Seek 14
Total Seek Time= 186

--------------------------------
Process exited after 91.24 seconds with return value 21
Press any key to continue . . .
```