SHORTEST SEEK TIME FIRST

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Code:

```c
#include<stdio.h>
#include<conio.h>
#include<math.h>
void main()
{
        int queue[100],t[100],head,seek=0,n,i,j,temp;
        float avg;
        printf("Enter the size of Queue\t");
        scanf("%d",&n);
        printf("Enter the Queue\t");
        for(i=0;i<n;i++)
        {
                scanf("%d",&queue[i]);
        }
        printf("Enter the initial head position\t");
        scanf("%d",&head);
        for(i=1;i<n;i++)
        t[i]=abs(head-queue[i]);
        for(i=0;i<n;i++)
        {
                for(j=i+1;j<n;j++)
                {
                        if(t[i]>t[j])
                        {
                                temp=t[i];
                                t[i]=t[j];
                                t[j]=temp;
                                temp=queue[i];
                                queue[i]=queue[j];
                                queue[j]=temp;
                        }
                }
        }
        for(i=1;i<n-1;i++)
        {
                seek=seek+abs(head-queue[i]);
                head=queue[i];
        }
        printf("\nTotal Seek Time is%d\t",seek);
        avg=seek/(float)n;
        printf("\nAverage Seek Time is %f\t",avg);
        getch();
}
```

Output:

```
C:\Users\RAVELLA ABHINAV\OneDrive\Desktop\lab0705\disk.exe

Enter the size of Queue 8
Enter the Queue 98 183 37 122 14 124 65 67
Enter the initial head position 53

Total Seek Time is177
Average Seek Time is 22.125000
```