

Code:

```
// Write a program to implement the following SSTF Disk Scheduling Policy
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```
#include <bits/stdc++.h>
using namespace std;
```

```
int findShortest(int head, int *queue, int n) {
    int shortest = INT_MAX, index;

    for (int i = 0; i < n; i++) {
        if (abs(head - queue[i]) < shortest) {
            shortest = abs(head - queue[i]);
            index = i;
        }
    }
    return index;
}
```

```
int main() {
    int head, n, range, total = 0;

    cout << "Enter the head position: ";
    cin >> head;

    cout << "\nEnter the number of requests: ";
    cin >> n;

    cout << "\nEnter the range of cylinder: ";
    cin >> range;

    int queue[n];
    cout << "\nEnter the cylinder numbers for the requests: ";
    for (int i = 0; i < n; i++) {
        cin >> queue[i];
    }

    cout << "\nThe order of execution: " << endl;

    for (int i = 0; i < n; i++) {
        int index = findShortest(head, queue, n);
        total += abs(head - queue[index]);
        cout << head << "-->" << queue[index] << endl;
        head = queue[index];
        queue[index] = INT_MAX;
    }

    cout << "\nTotal Head Movements: " << total << endl;
```

```
double avg_seek_len = (double) total / n;  
cout << "\nAverage Seek Length: " << avg_seek_len;  
  
return 0;  
}
```

Output:

Enter the head position: 51

Enter the number of requests: 8

Enter the range of cylinder: 200

Enter the cylinder numbers for the requests: 96 185 35 122 16 120 55 57

The order of execution:

51-->55

55-->57

57-->35

35-->16

16-->96

96-->120

120-->122

122-->185

Total Head Movements: 216

Average Seek Length: 27