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**CS342 Assignment 12**

Problem 1:

Compile: g++ Q1.cpp -o Q1

Execute: ./Q1

Input:

Enter the head position: 100

Enter the number of cylinders: 200

Enter the number of requests: 5

23 89 132 42 187

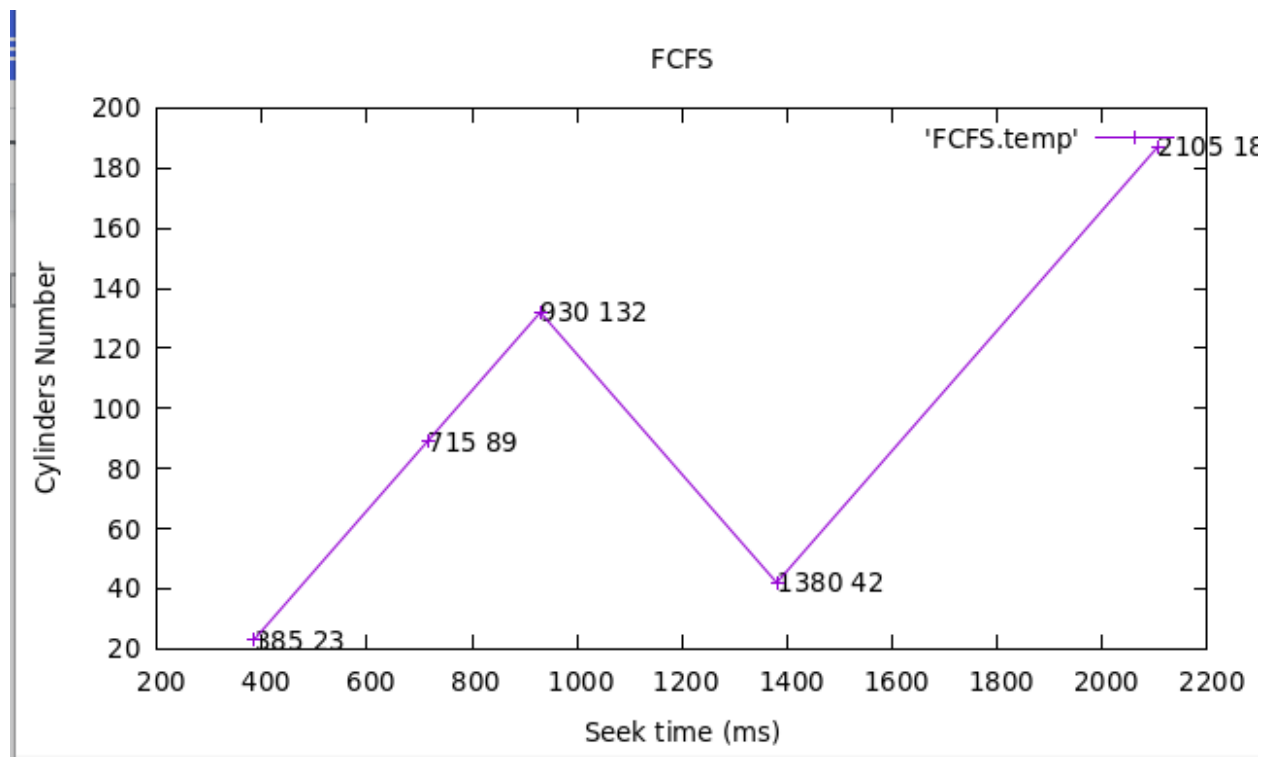
Output:

-----FCFS-----

Total Head Movement: 421

Seek Time: 2105

23---->89---->132---->42---->187

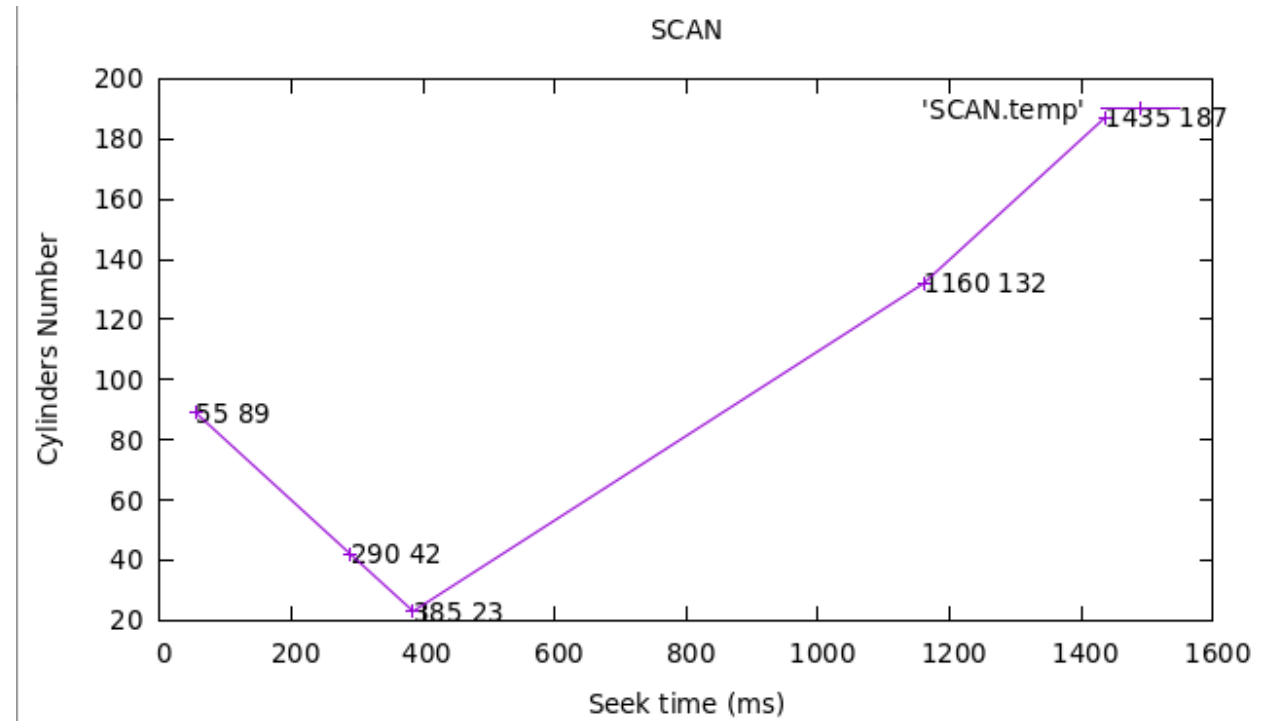


-----SCAN-----

Total Head Movement: 287

Seek Time: 1435

89---->42---->23---->132---->187

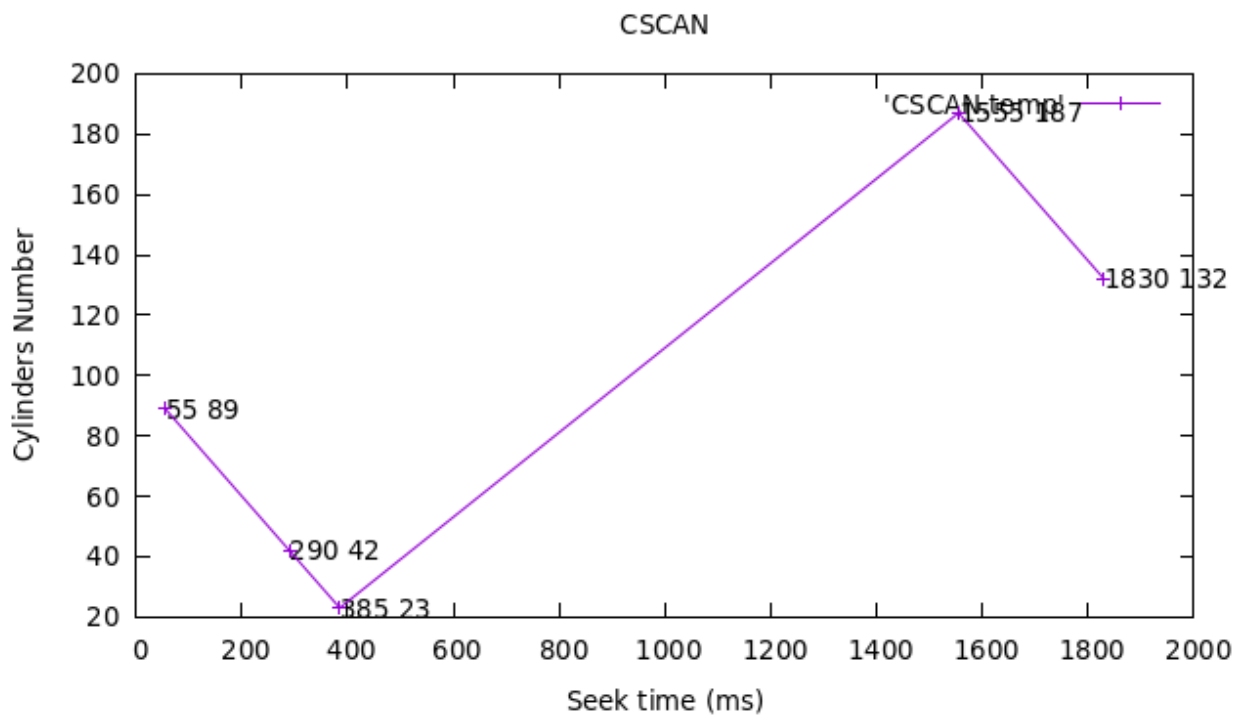


## -----C-SCAN-----

Total Head Movement: 366

Seek Time: 1830

89---->42---->23---->187---->132

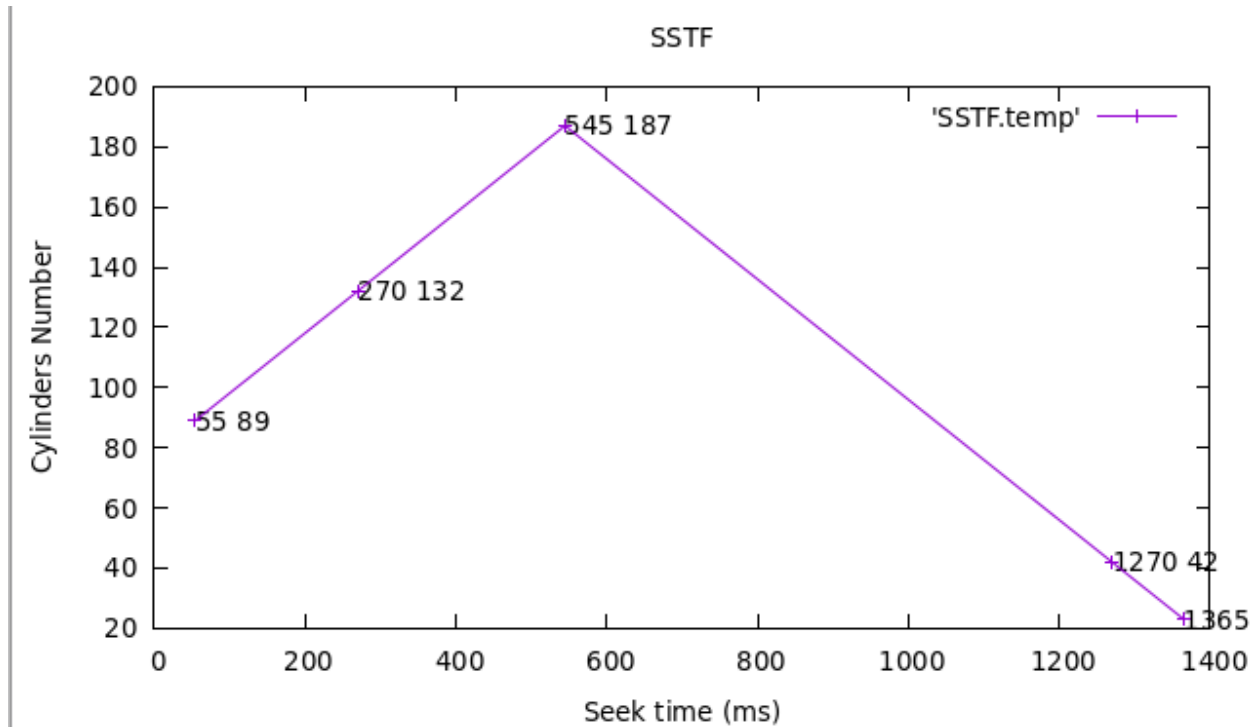


-----SSTF-----

Total Head Movement: 273

Seek Time: 1365

89---->132---->187---->42---->23



-----Sorted Order of Algorithms-----

SSTF:1365

SCAN:1435

CSCAN:1830

FCFS:2105

Problem 2:

Compile: gcc Q2.c -o Q2

Execute: ./Q2

Example 1:

Input:

Enter the head position: 100

Enter the number of cylinders: 200

Enter the number of requests: 5

23 89 132 42 187

Output:

Total Head Movement: 241

Seek Time: 1205

Example 2:

Input:

Enter the head position: 100

Enter the number of cylinders: 200

Enter the number of requests: 8

98 183 37 122 14 124 65 67

Output:

Total Head Movement: 252

Seek Time: 1260