Project Documentation

Name: K.K.A.Sandaruwan

IndexNo: 17001552

Used algorithm:

- To update no of books in xth shelf to k -: replace value in array index x-1 with k shelf [x-1] = k
- To get no of books in between x & y with kth rank -:
 define new array with given range
 assign values to new array
 sort new array
 get the value in the kth index in array

```
shelf [N] 1=<x=<y=<N
range = s = y-x+1
subshelf [s]
FOR i<y & j< s
subshelf [j] = shelf [l]

FOR i<N;
FOR j=i+1 & j<N
IF subshelf[j]<subshelf[i]
temp=subshelf[j]
subshelf[j]=subshelf[i];
subshelf[i]=temp;
```

Test cases:

```
2019-Compulsory Take Home Assignment.pdf - Adobe Reader
                                                                                                 - 🗆 ×

    →
    →
    □
    2
    / 2
    ●
    ●
    65.7%
    →
    □
    □
    Find

                                                                                                         nter no of queires : 2
nter query : 0
 .
                Output Format
                 For every test case, output the results of the queries in a new line.
                 Sample Input
                                                                                                        Enter no of shelves : 4
                 0121
                                                                                                      1
Enter no of queires : 4
Enter query : 0
                0122
                 4321
                0111
                 111
                                                                                                        i
Successfully changed
Enter query : 0
                 0111
                 0 1 4 3
Sample Output
                 You are required to submit the following:
A zip file which is named with your INDEX NUMBER (ex:"18020013.zip")
```