**User Documentation**

**Description of the problem to solve**

Implementation of the kthSmall algorithm by a function alongside a partition function that not only rearranges the array elements but gets the pivots index. The end goal is to find the k-th smallest element in the array.

**File location on centOS**

home/STCLOUDSTATE/it1032ao/CSCI301/Project3

**How to compile the program**

Compiling the program is as simple as being in the file location on centOS and entering the following command “g++ kthSmallest.cpp”.

**How to run the program**

After compiling the program, you are ready to run it. Type the command “./a.out” which will then prompt you with the first part of the program, asking you how big of an array you want (Must be bigger than 0). After that you must enter the array numbers. After that you are prompted to enter the kth element which then will return the kth smallest and display the appropriately sorted array.