

# Assignment 3

**Objective:** To implement a C/C++ program to find the  $k^{\text{th}}$  smallest element in the array.

**Brief Theory:** Consider an array  $\text{Arr}[]$  of size  $n$  having distinct element and a number  $k$ , where  $k$  is smaller than the size of the array.

**Input:**

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 3 | 2 | 7 | 9 | 6 | 0 | 8 | 1 |
|---|---|---|---|---|---|---|---|

 $k=5$

**Output:** The 5<sup>th</sup> smallest element is 6.

**Task:** Write a program to find  $k^{\text{th}}$  smallest element.

**Apparatus and components required:** Computer with C or C++ Compiler and Windows operating platform.

**Experimental/numerical procedure:** Coding, compilation, editing, run and debugging.