**Birla Institute of Technology & Science, Pilani, K. K. BIRLA Goa campus**

**Operating Systems**

**First Semester 2018-2019**

**Tutorial**

**Basics of Multi-Threaded Programming**

**Question**

**To search an element from the array of integers using Multithreaded programming concept**

**1. Declare a constant on some MAXSIZE (as size of an array).**

**2. Store the data in an array same as its index (so that there are no repeated entries).**

**3. Read an element to be searched from the user (key).**

**4. Create two threads to search the key element simultaneously. One thread should start searching from left index (from zero) and the other should start searching from right index (from MAXSIZE-1).**

**5. The thread which finds the key should return the index of key to the main thread. Once the key is found, both the threads should stop searching further.**

**6. The main thread should display whether the key element is found or not found. If the key is found then display which thread found it and at which index.**