DEPARTMENT OF INFORMATION TECHNOLOGY					
OBJECT TECHNOLOGY LABORATORY	LAB ASSIGNMENT- 3 (Wrapper Class, Array, String & Vector)	Doc No.: CEMK/IT/IT491/03 Revision No.: 2.0 Page 1 of 1			

College of Engineering and Management, Kolaghat Object Technology Laboratory, (5th Semester, IT)

## 1. Create a 2-D array that will store the following data:

COUNTRY	CITY		
USA	New York, Washington DC, Chicago, Boston		
SOUTH AFRICA	Cape Town, Port Elizabeth, Johannesburg		
ENGLAND	London, Glasgow, Liverpool		
FRANCE	Paris		
INDIA	New Delhi, Mumbai, Kolkata, Chennai		

- a. Write a JAVA program to take country as user input and display corresponding cities and vice versa. For wrong input, display "NO SUCH COUNTRY!!!" or "NO SUCH CITY!!!"
- b. Store all the cities in another 1-D array in alphabetical

## order 2. Create a class called **Student** with the following:

- a. Instance variables name, rollno, marks; use wrapper class to declare them
- b. A three-argument constructor
- c. A method to display the **Student** detail

Write a JAVA program to create an array of four **Student** objects and sort the array according to their marks in descending order *using a method that will take the array reference as argument*.

- 3. Write a program in JAVA to accept the name of several fruits in command line and store them in a Vector. Now perform the following:
  - a. Add another fruit at the end
  - b. Insert another fruit at a specified location
  - c. Remove a fruit from a specified location
  - d. Copy all the elements of the Vector into an array
  - e. Display the contents of the array