## **UCS411: ARTIFICIAL INTELLIGENCE**

## **Assignment-2 (Lab Assignment)**

1. Write a code in python for the 8-puzzle problem by taking the following initial and final states

Initial State			
1	2	3	
8		4	
7	6	5	

Goal State			
2	8	1	
	4	3	
7	6	5	

- 2. Given two jugs- a 4 litre and 3 litre capacity. Neither has any measurable markers on it. There is a pump which can be used to fill the jugs with water. Simulate the procedure in Python to get exactly 2 litre of water into 4-liter jug.
- 3. Write a Python program to implement Travelling Salesman Problem (TSP). Take the starting node from the user at run time.

