# CSE321 Class Test [Process Synchronization]

Marks: 5 TIme: 20 min

### **Specification**

In this problem you have to simulate patient activities in a hospital. There are **n** patients. Each of them will consult with Dr. X. To consult with Dr. X, the weight and height need to be measured for each patient. These measurements are done in room no. 1. In room 1, there can be **at most 3** patients simultaneously measuring their height and weight. After measuring these, **only 1** patient can enter the chamber of Dr. X. **Simulate** this scenario. **Take n as input**.

### **Sample I/O**

**Input:**

3

**Output:**

User 1 entered room 1

User 2 entered room 1

User 1 measuring height

User 2 measuring height

User 3 entered room 1

User 1 measure weight

User 2 measuring weight

User 1 leaving room 1

User 1 entering Dr. X’s chamber

User 1 consulting with Dr. X

User 1 leaving Dr. X’s chamber

User 3 measuring height

User 2 leaving room 1

User 2 entering Dr. X’s chamber

User 3 measuring weight

User 3 leaving room 1

User 2 consulting with Dr. X

User 2 leaving Dr. X’s chamber

User 3 entering Dr. X’s chamber

User 3 consulting with Dr. X

User 3 leaving Dr. X’s chamber