**Assignment 2**

**We need to develop the following software for automating the activities of a 5-star hotel.**

**Hotel Automation Software: A hotel has a certain number of rooms. Each room can be either single bed or double bed type and may be AC or Non-AC type. The rooms have di\_erent rates depending on whether they are of single or double, AC or Non-AC types. The room tari\_ however may varyduring di\_erent parts of the year depending up on the occupancy rate. For this, the computer should be able to display the average occupancy rate for a given month so that the manager can revise the room tari\_ either upwards or downwards by a certain percentage. Guests can reserve rooms in advance or can reserve rooms on the spot depending upon availability of rooms. The receptionist would enter data pertaining to guests such as their arrival time, advance paid, approximate duration of stay, and the type of the room required. Depending on this data and subject to the availability of a suitable room, the computer would allot a room number to the guest and assign a unique token number to each guest. If the guest cannot be accommodated, the computer generates an apology message. The hotel catering services manager would input the quantity and type of food items as and when consumed by the guest, the token number of the guest, and the corresponding date and time. When a customer prepares to check-out, the hotel automation software should generate the entire bill for the customer and also print the balance amount payable by him. Frequent guests should be issued identity numbers which would help**

**them to get special discounts on their bills.**