Problem statement

As a hotel manager, I want to allocate rooms to people visiting my hotel according to their request. I have a multi-storied hotel with many rooms on each floor. The list of rooms present in each floor is given below. When a visitor queries for a specific kind of room I should be able to quickly allocate an available room.

Rooms on the first floor:

101 - Single Occupancy, AC
102 - Double Occupancy, AC
103 - Double Occupancy

Rooms on the second floor:

201 - Single Occupancy, AC
202 - Single Occupancy
203 - Double Occupancy, AC
204 - Triple Occupancy, AC

When allocating a room I should also show an estimate of price. The cost of rooms is based on the occupancy as shown below:

Single occupancy: Rs. 2000 / day
Double occupancy: Rs. 3000 / day
Triple occupancy: Rs. 4000 / day
Air conditioned rooms have fixed additional charge of Rs. 1000 / day.

The program needs to be able to take multiple inputs and maintain state.

Input 1:
Single occupancy AC

Output 1:
Room nuomber: 101, first floor, air conditioned, single occupancy, estimated: Rs. 3000 / day

Input 2:
Single occupancy AC

Output 2:
Room number: 201, second floor, air conditioned, single occupancy, estimated: Rs. 3000 / day

Input 3:
Single occupancy AC

Output 3:
Single occupancy AC room not available

Input 3:
Single occupancy non-AC

Output 3:
Room number: 202, second floor, non-air conditioned, single occupancy, estimated: Rs. 2000 / day

Extension: Nowadays some people come with very specific preferences saying they would prefer the room to be allocated in the specified floor. I want to be able to allocate rooms as per their preference.

Input 1:
Single occupancy AC second floor

Output 1:
Room number: 201, second floor, air conditioned, single

occupancy

Input 2:
Single occupancy AC second floor

Output 2:
Single occupancy AC room not available