

Below are the set of tasks listed which have to be completed in 24hrs. Send the code as zip in mail as soon as you complete max is 24 hrs.

In a building there are 10 Rooms(Room names RoomA, RoomB,...RoomJ). Each room can accommodate 10 people. At all times distribution across rooms should be almost equal (except when there is any specific criteria for a room). Try to have minimal movement of people. Try to avoid moving people who are there in the room for a long time.

1. initially 30 people came. So Need to distribute 30 people(provide names for each and every one) across 10 Rooms.
2. After some time 5 more new people came so we need to allocate rooms for them.
3. After some time Need to do maintenance in 2 rooms(RoomC, RoomF), so need to reallocate people in those rooms
4. After some time One new room RoomK is added with capacity of 1 person, So again need to reallocation
5. said 25 people vacating the rooms, reallocate or distribute if required. 25 is not random. For now 25 people can be assumed or can be accepted as input.

Implement the above task in two ways.

1. Assume all the above are happening in sequence.
2. Assume all the above are happening in parallel random order.