1. List the members of your group below. Underline your name.

2. Consider the relational schema from the previous class exercise: \( R_1(B, N, C, D) \), representing the building name (B), room number (N), capacity (C), and description (D) of rooms on campus. Provide SQL queries for the following.

   (a) Pairs of rooms \((a, b)\) in the same building with the capacity of \(b\) greater than that of \(a\).

   (b) Pairs as in Question 2a, but with the added constraint that there is no room \(c\) in the same building with capacity between those of \(a\) and \(b\).

   (c) The rooms with the largest capacity in each building.

   (d) The buildings with at least five rooms with capacity 100 or more.
3. Provide relational algebra equivalents of the SQL queries in Question 2.