

Discussions

Problem1:

Course density in Toronto is investigated based on sections and wards and is calculated by dividing the number of the courses by the area of wards. According to query 1.1, the swimming courses section in Ward 13 has the highest density, which is 187.7 courses per square kilometer. Query 1.3 investigates the missing number of wards for each section. The result shows that skiing courses are the rarest with only two wards having skiing courses. It might be due to facility restrictions. The second rarest is courses for older adults. More than half of the wards do not offer courses specifically for older adults. Although older adults might have health concerns for many recreational courses, the fact of zero recreational courses specifically designed for them in a ward is unfair. Query 1.4 shows that all wards have courses with sections "general interest" and "health & wellness". Also, ward 20 is the only ward that does not have courses with section "Arts & Heritage", "Camps", "Sports", and "Preschool", and ward 40 is the only ward that does not have courses with section "Swimming". (Query 1.5). Therefore, ward 20 can open more courses in the four sections, and ward 40 can open more swimming courses.

Problem2:

How the elderly can have access to recreational courses in Toronto is investigated here. The case is that an 82-year-old lady wants to find some courses to take starting in April that are held in a recreational center nearby. According to query 2.1, Mary wants to take a swimming course on Sunday, and take a non-swimming course another day in the week. There are two non-swimming courses available which are Cardio and Taichi, and there are 11 swimming courses available. Mary wants to take only private swim lessons in the afternoon. Based on query 2.2, Mary now has 4 available course combinations that she can choose from.

Problem3:

How working adults have access to recreational courses in Toronto is investigated here. A special case is created. Since working adults are always busy working during weekdays, they might be only able to attend recreational courses during weekends. Also, I suppose that the person lives in Scarborough East and wants to spend 2-10 hours taking a swimming course. (More detailed information is in questions.pdf). Based on these requirements, the query results show 17 courses that meet the requirements. The courses' start_hour are all between 9 to 13, and most courses' location (14 in 17) is Toronto Pan Am Sports Centre, which might be due to better facilities. Four courses have schedules both on Saturday and Sunday, and the rest of them are held only one day each weekend. Since Karen is interested in course 2760451, we write query 3.1 to check if she meets the register requirements, and we notice that she meets the required age range. Also, there are 7 spaces available for the course. Therefore, she can register for the course if she wants.