

Carnegie Mellon University in Qatar

15415 – Spring 2020

Recitation 5

Consider the following relation schema for our university's activities and a sample database table to help you work out your queries:

Activities (sid: integer, sname: string, activity: char(50), Points: integer)

Exercise (1) Using the *Activities* schema, write the following TRC expressions:

1. Write a TRC expression that returns all people who participated in at most two activities.
2. Find the names of people who participate in at least all activities that Hammoud practices.

Exercise (2) Using the *Activities* schema, write the following SQL expressions:

1. Find the names of people who participate in at least all activities that Hammoud practices.
2. Output the users who have less activities than others without using the min function.

Below is a sample table for the above schema that you can use to work out your expressions:

sid	Name	Activity	Points
1	Omar Sinan	Student Majlis	10
2	Rahil Ahmed	Tennis Club	1
2	Rahil Ahmed	Student Majlis	5
2	Rahil Ahmed	Library	1
3	Zeinab Khalifa	Tennis Club	2
4	Aliaa Essam	Indoor Activity	2
4	Aliaa Essam	Tennis Club	2
5	Hammoud	Library	12
5	Hammoud	Student Majlis	5