

CLASS ACTIVITY

17/08/2023

DEADLINE – End of the class

1) Implement the following queries in the simpleRA codebase.

Given are three tables, STUDENTS, MARKS, ADVISORS. (We will share the .csv file in Teams). Add these files into your data folder. Now write the following queries and submit them in '.ra' format ('a.ra', 'b.ra', 'c.ra' etc). The columns to be extracted for each query are given in bold.

a) List all students with sex as male (0 represents male, 1 represents female)

[stud_id, stud_age]

b) List all students whose sex is female and age > 16.

[stud_id, stud_age]

c) List all students whose sex is opposite to their advisor sex.

[stud_id, adv_id, stud_sex, adv_sex]

d) List all students whose maths marks greater than or equal to 70, physics marks strictly greater than 60 and age in between 16 and 18 (inclusive).

[stud_id, Maths_marks, Physics_marks, stud_age]

e) List all female students whose advisor id is 1 and maths marks > 70.

[stud_id, Maths_marks]

f) List all advisors who had year of experience less than or equal to 4 and salary strictly greater than 3 lakhs.

[adv_id, yrs_of_exp]

g) List all students whose student advisor age is strictly greater than 40.

[stud_id, adv_id]

h) List of all students whose advisor id = 2 and maths marks > 90

[stud_id]

2) Complete the implementation of the source command in the codebase.

You will have a file (say example.ra) in the data folder which contains some queries, when you call the following command,

SOURCE example

It should run all the queries in the file.