S. V. National Institute of Technology Surat

CO 405: PRINCIPLE OF PROGRAMMING LANGUAGES (CS-IV)

Assignment-5

Format of structure:

student(rollno, name, address(building_name, city, zipcode),[sub(teacher_code,subject_name]).

Following data are in represented according to the format given:

student(u223, ram, address(shlimar_park, surat, 395001), [sub(t1,algebra), sub(t2,physics), sub(t3,english), sub(t5,hindi)]).

student(u226, lakshman, address(honey_park, delhi, 110002), [sub(t3, history), sub(t4,science), sub(t1,geometry), sub(t5, hindi)]).

student(u227, bharat, address(shally_tower, mumbai,400004), [sub(t1,geometry), sub(t2, chemistry), sub(t3,english_grammer)]).

Find the results for following questions using PROLOG program:

1. Find total number of subjects chosen by each student.
2. Find name and zipcode of each student.
3. Write roll no. and name of all students staying in delhi.
4. List name of all subjects taken by teacher t1.
5. List roll no. of all students learning "hindi" subject
6. List building_name and city_code for all students in the given format (format: [(building_name, citycode)]).
7. List all teachers (teaching codes) for each given student.
8. Find the subject, which is maximum chosen.
9. List all subjects taken by each teacher.