CS 330 Prolog Project: Due 05/6/2017, 9:00 AM

Motivation: When a username/password combination fails, users are asked to answer a set of questions, such as the mother's maiden name, first pet's name etc., and allowed to reset the password in case the user answers a predetermined number of questions successfully. Our objective is to enhance this capability.

Assume that the type of questions to be asked come in three categories, personal information (something about the user), usage information (Information about the usage) and presence information (like the time of day, weather, temperature). Below are some examples some potential attributes that can be queried as questions. You will add more attributes.

Personal Information	Usage	Presence
Last name	Job title	Time of Day
Mother's maiden name	Home directory	Season (Summer/ Winter, etc.)
First pet's name	Last day to login	Yesterday's weather?
Last High School's name	Boss's name	Month of last big storm
Mother's birth place	Security clearance	Randomly generated riddle
Number of siblings	Office number	A Captcha

Each answer is given a "difficulty score" between 1 and 10. For example, a user last name might get a score of 1, the first pet's name might get a score of 3 and the mother's maiden name might get a score of 8.

Your Assignment:
1. Add five more rows in the database.
2. Assign an Integer "difficulty score" for each attribute value in each category. Please spread them out in the [1,10] range.
3. Write a Prolog program that asks questions (the number of questions not determined a priori, or hard coded) that will allow the user to reset his password when a) the questions are generated from at least two categories, and b) the sum of the "difficulty scores" of the asked questions is greater than 9. (In practice we would wait for answer and only add to the sum if the answer was correct. We won't worry about user responses here.)
4. Your program should eventually be able to return all possible question sequences that satisfy the requirements specified in part 3 (i.e. every time you re-start your program, you should get a new sequence of questions).

Submission [sent as attachments to pdogra@gmu.edu]:
1. The attributes and "difficulty scores" you choose for each category.
2. The predicates and rules you wrote.
3. A sample run.
4. The source code.

Some comments. The predicate write('How many siblings do you have?') will send that string to standard output. The predicate nl creates a new line. Note that single quotes are necessary for embedded blanks. This is assignment is similar to but may not be identical to the other sections. All details should be original. You might need to look up some simple built-in Prolog predicates online.