CS2104 Programming Language Concepts

Tutorial 11 : Constraint Programming

(week of 9th November 2015)

Please may work from loris-88.

Q1 We will just solve this puzzle in Prolog (with constraint-solving), and devote the rest of the time for Lab 5.

Figure out the hospital bill, first name, appetizer and astrological sign for each person using the clues given. Below are all categories and options used in this problem.

Hospital Bills	First Names	Appetizers	Astrological Signs
$550	Jorge	buffalo wings	Aries
$760	Kayla	fried mozarella	Leo
$960	Landyn	fried pickles	Pisces
$1610	Perla	potato skins	Sagittarius
$2500	Skylar	soup of the day	Virgo

1.   The Sagittarius owes more money than Landyn.
2.   The person who ordered soup of the day as an appetizer owes less money than the Aries.
3.   The patient with the $550 hospital bill didn't order soup of the day.
4.   The 5 people were the patient with the $760 hospital bill, the person who ordered soup of the day as an appetizer, Skylar, the Pisces, and the patient with the $960 hospital bill.
5.   Either the Sagittarius or the Virgo ordered fried pickles.
6.   The Pisces didn't order buffalo wings.
7.   The person who ordered fried pickles as an appetizer is Kayla.
8.   The patient with the $960 hospital bill is the Virgo.
9.   Kayla owes less money than Skylar.
10.   Of Perla and the person who ordered potato skins as an appetizer, one has the $1610 hospital bill and the other has the $960 hospital bill.

Complete tut11clp.pl; then consult(tut11clp), run with main(Answer).

Acknowledgement : this puzzle is taken from http://www.logic-puzzles.org.