# Cognitive Science
## Knowledge Representation & Organisation

Erasmus Programme
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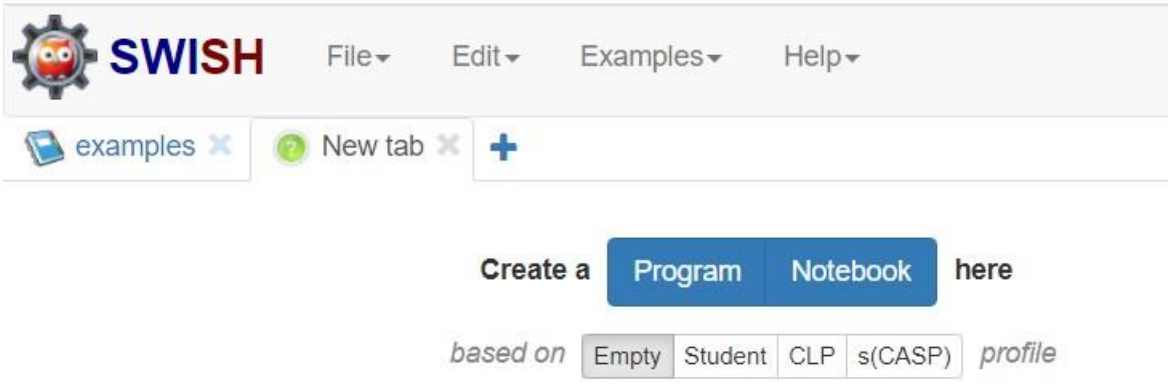
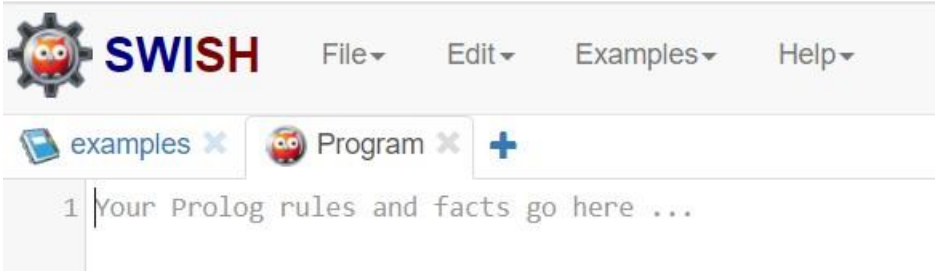
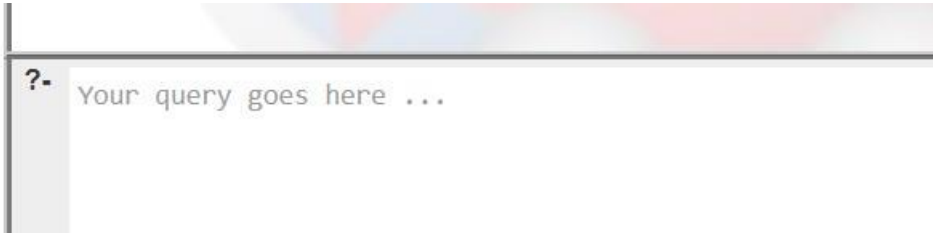
# PROLOG

- Free online command line environment of PROLOG for automatic reasoning.
- Declaration area for facts and rules
- Query area for user queries
- Facts like male(george) / child(nikos, mary)
- Rules like parent(X,Y) := child(Y,X)
- Write in web : swi prolog online…

# Starting Swi Prolog



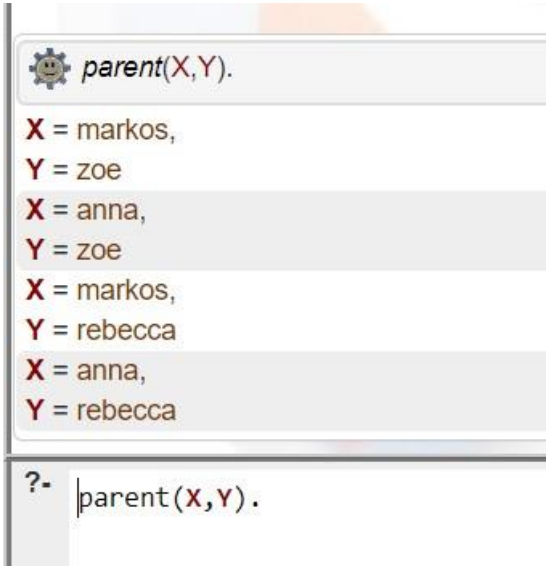



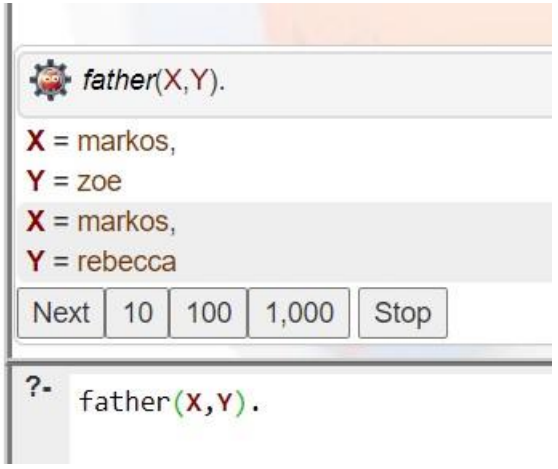
# Declaration area (facts and rules)

- An example

# Query area

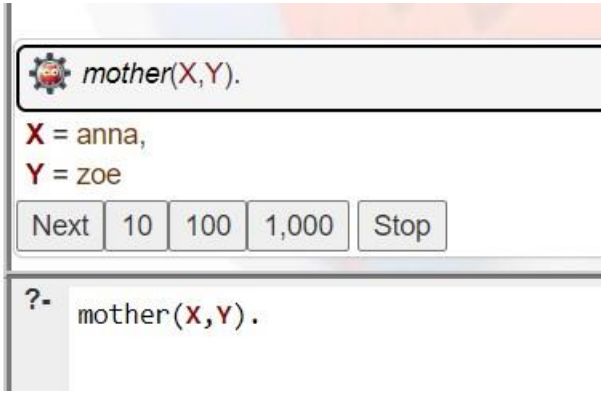
- An example

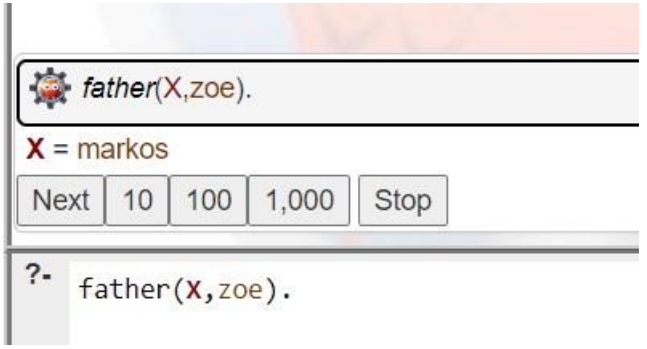


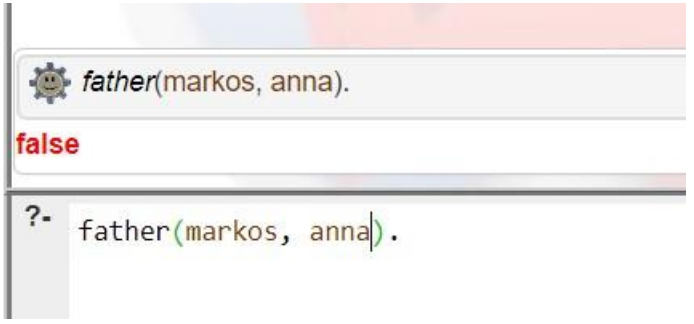



# Query area (cont)

- An example



# Exercise 5

- Make your family tree
- Your father, mother, brothers and sisters
- Write down in the declaration area the following facts: male or female for all of them, all the child pairs
- Write down next, after the facts, the rules: parent, father and mother
- Make in the query area the following queries:
- parent(X,Y) and take all the results through CTRL+ENTER and then the NEXT button.
- fatherX,Y) and take all the results through CTRL+ENTER and then the NEXT button.
- mother(X,Y) and take all the results through CTRL+ENTER and then the NEXT button.

# Exercise 5 (cont)

- A query with one variable and one constant
- A query with all constants to take true or false
- Make your family tree
- Take a snapshot of the declaration area and a snapshot for every query and its results.
- Put all the snapshots in a word file and send it as your 5th exercise by email