

## CMSE 462 Assignment 4

(Prolog - I)

**Program to be done in groups of two, personal data to be done individually. Pick your partner!**

1) Create a database of your relatives using predicates **child\_of/2**, **male/1**, **female/1** and **married\_to/2**. **child\_of(x,y)** means x is the child of y, and **married\_to(x,y)** means x is married to y. If two persons have the same name (e.g. joe), make them distinct by calling one joe1 and the other joe2 etc. Make sure you have all the information up to your grandparents from both the mother side and the father side. (to be done individually)

2) Write definitions for the following predicates.

**father(X,Y):- .... /\* X is the father of Y \*/**

**mother(X,Y):- .... /\* X is the mother of Y \*/**

**aunt\_m(X,Y):- .... /\* X is the aunt of Y (mother's sister) \*/**

**aunt\_f(X,Y):- .... /\* X is the aunt of Y (father's sister) \*/**

**grandfather(X,Y):- .... /\* X is the grandfather of Y (both mother and father side) \*/**

**grandmother(X,Y):- .... /\* X is the grandmother of Y (both mother and father side) \*/**

**cousin(X,Y):- ... /\* X is the cousin of Y \*/**

**niece(X,Y):- /\* X is the niece of Y \*/**

**nephew(X,Y):- .... /\* X is the nephew of Y \*/**

**brother(X,Y):- ... /\* X is the brother of Y \*/**

**sister(X,Y):- ... /\* X is the brother of Y \*/**

What to hand in: CD containing your program, as well as screenshots (.jpg) for the results obtained by a call to each predicate. Make sure your name, student number, as well as the course name, semester, and assignment number appear on the CD. More than one group may use the same CD, provided that their work is in separate directories, and the directories are named by student numbers.