Lecture 9 :- PROLOG.

1- FACTS.

2- RULES.

P66.

instructor(chan, math273).
instructor(patel, ee222).
instructor(grossman, cs301).

Variable Capital

Constant. Small letter.

teaches(chan,X).

enrolled(kevin, math273).
enrolled(juana, ee222).
enrolled(juana, cs301).
enrolled(kiko, math273).
enrolled(kiko, cs301).

Q :- Who is the instructor of math273. → instructor(X, math273).

Q :- Tell us the courses where juana is enrolled → enrolled(juana, X).

instructor(P X, C Y) ∧ enrolled(S Z, C V).

P X → Teacher. C Y → Course. S Z → Student. C V → Courses.

; V.

teaches(P, S) :- instructor(P, C), enrolled(S, C).

→

instructor(chan, math273).
instructor(patel, ee222).
instructor(grossman, cs301).

enrolled(kevin, math273).
enrolled(juana, ee222).
enrolled(juana, cs301).
enrolled(kiko, math273).
enrolled(kiko, cs301).

teaches(chan, X).
P2 chan.
S2 X.

teaches(chan, X) :- instructor(chan, C), enrolled(X, C).

math273.

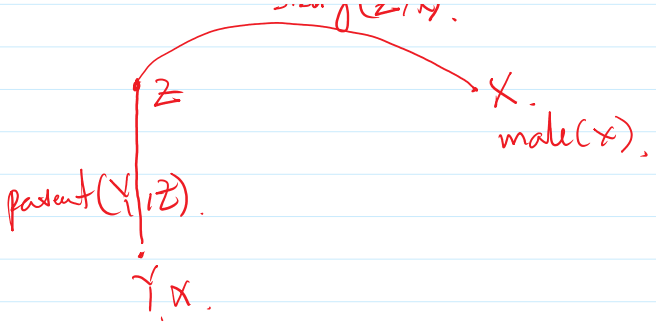
C → math273.

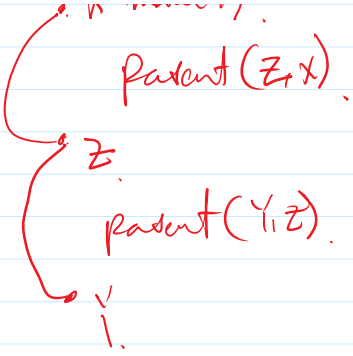
Uncle(X, Y) :- .

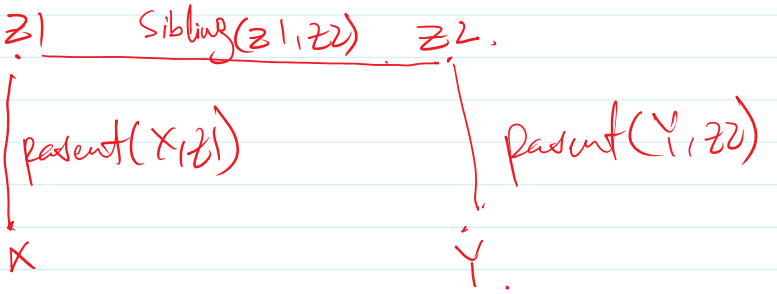
Sibling(Z, X).

Z X

X male(X).
Parent(Z, X).


Z
X.
male(x).
parent(Y,Z).
Y
X.


parent(Z,X).
Z.
parent(Y,Z).
Y
1.


Z1
Sibling(Z1,Z2)
Z2.
parent(X,Z1)
parent(Y,Z2)
X
Y.

→ Symmetric. Anti-Symmetric. Transitive (Next class).