# **Prolog Introduction**

**Program:**

CODE 1:

woman(mia).

woman(jody).

woman(yolanda).

playsAirGuitar(jody).

party.

Query 1: ?-woman(mia).

Query 2: ?-playsAirGuitar(mia).

Query 3: ?-party.

Query 4: ?-concert.

CODE 2:

happy(yolanda).

listens2music(mia).

Listens2music(yolanda):-happy(yolanda).

playsAirGuitar(mia):-listens2music(mia).

playsAirGuitar(Yolanda):-listens2music(yolanda).

CODE 3:

likes(dan,sally).

likes(sally,dan).

likes(john,brittney).

married(X,Y) :- likes(X,Y) , likes(Y,X).

friends(X,Y) :- likes(X,Y) ; likes(Y,X).

CODE 4:

food(burger).

food(sandwich).

food(pizza).

lunch(sandwich).

dinner(pizza).

meal(X):-food(X).

CODE 5:

owns(jack,car(bmw)).

owns(john,car(chevy)).

owns(olivia,car(civic)).

owns(jane,car(chevy)).

sedan(car(bmw)).

sedan(car(civic)).

truck(car(chevy)).

**OUTPUT:**

**CODE 1:**

**woman(mia).**

**true**

**playsAirGuitar(mia).**

**true**

**concert.**

**procedure "concert" does not exist**

**CODE 2:**

**playsAirGuitar(mia).**

**true**

**playsAirGuitar(yolanda).**

**true**

**CODE 3:**

**likes(dan,X).**

**X = sally.**

**married(dan,sally).**

**true.**

**married(johm,brittney).**

**false**

**CODE 4:**

**food(pizza).**

**true**

**meal(X),food(X)**

**X = burger**

**X = sandwich**

**dinner(sandwich)**

**false**

**CODE 5:**

**owns(john,X).**

**X = car(chevy).**

**owns(john,\_).**

**true**

**ownd(Who,car(chevy)).**

**Who = john.**

**owns(jane,X),sedan(X).**

**false.**