**Prolog Practice Examples**

**Example 1:**

woman(mia).

woman(jody).

woman(yolanda).

playsAirGuitar(jody).

party.

?-  woman(mia).

yes

?- playsAirGuitar(jody).

yes

?- playsAirGuitar(mia).

no

?- tatooed(jody).

procedure `tatooed(A)' does not exist

**Example 2:**

   happy(yolanda).  
   listens2Music(mia).  
   listens2Music(yolanda):-  happy(yolanda).  
   playsAirGuitar(mia):-  listens2Music(mia).  
   playsAirGuitar(yolanda):-  listens2Music(yolanda).

?- playsAirGuitar(mia).

yes

**Example 3:**

happy(vincent).

listens2Music(butch).

playsAirGuitar(vincent):- listens2Music(vincent),happy(vincent).

playsAirGuitar(butch):- happy(butch).

playsAirGuitar(butch):- listens2Music(butch).

?- playsAirGuitar(vincent).

no

?- playsAirGuitar(butch).

yes

**Example 4:**

   woman(mia).  
   woman(jody).  
   woman(yolanda).  
     
   loves(vincent,mia).  
   loves(marsellus,mia).  
   loves(pumpkin,honey\_bunny).  
   loves(honey\_bunny,pumpkin).

?-woman(X).

X = mia

X = jody

X = Yolanda

?- loves(marsellus,X), woman(X).

X=mia

**Example 5:**

food(burger). % burger is a food

food(sandwich). % sandwich is a food

food(pizza). % pizza is a food

lunch(sandwich). % sandwich is a lunch

dinner(pizza). % pizza is a dinner

meal(X) :- food(X). % Every food is a meal OR Anything is a meal if it is a food

?- food(pizza). % Is pizza a food?

yes

?- meal(X), lunch(X). % Which food is meal and lunch?

X = sandwich.

?- dinner(sandwich).

no.

?- meal(X), dinner(X).

X = pizza.

?- meal(What).

What = burger

What = sandwich

What = pizza

?- meal(X), dinner(Y).

X = burger,

Y = pizza