Introduction to Prolog

1.) Write facts corresponding to the idea that pizza, burgers, and burritos are served warm. You should have three facts in total, one for each food.

```
servedWarm(pizza).
servedWarm(burger).
servedWarm(burrito).
```

2.) Write a query to determine which foods are served warm.

```
?- servedWarm(X).
```

3.) Write facts corresponding to the idea that Alice likes pizza, burgers, burritos, and yogurt, and that Bob likes pizza, burgers, salad, and milk. You should have eight facts in total. Note that uppercase letters denote variables, so you'll need to use the atoms `alice` and `bob`.

```
likes(alice, pizza).
likes(alice, burger).
likes(alice, burrito).
likes(alice, yogurt).
likes(bob, pizza).
likes(bob, burger).
likes(bob, salad).
likes(bob, milk).
```

4.) Write a query asking which foods Alice likes.

```prolog
?- likes(alice, X).
```

5.) Write a query asking who likes pizza.

```prolog
?- likes(X, pizza).
```

6.) Write a rule encapsulating the following idea: Bill likes any food that's served warm. The name of the rule should be the same as the fact name you used in the previous problem.

```prolog
likes(bill, Food) :-
  servedWarm(Food).
```

7.) Write a rule encapsulating the following idea: Janet likes any food that both Alice and Bob like. The name of the rule should be the same as before.

```prolog
likes(janet, Food) :-
  likes(alice, Food),
  likes(bob, Food).
```

8.) Write code (potentially both rules and facts) encapsulating the following idea: Mel likes the foods that Janet likes, along with yogurt. Any rules and/or facts you define should use the same name as before.

```prolog
likes(mel, Food) :-
  likes(janet, Food).
likes(mel, yogurt).
```