

1 The File garden_party.pl

```
solve(Solution)
```

garden_party.pl

```
    solve(Solution) :-
```

Four chefs, Aisha, Emma, Mei, and Winona, are attending a garden party. They each prepare a different dish and bring a different beverage.

```
    Solution = [
        [aisha, Dish1, Beverage1],
        [emma, Dish2, Beverage2],
        [mei, Dish3, Beverage3],
        [winona, Dish4, Beverage4]
    ],
```

The dishes are Pad Thai, Frybread, Tagine, and Biryani.

```
    permutation([Dish1, Dish2, Dish3, Dish4],
        [pad_thai, frybread, tagine, biryani]),
```

The beverages are Tonic, Lassi, Kombucha, and Amasi.

```
    permutation([Beverage1, Beverage2, Beverage3, Beverage4],
        [tonic, lassi, kombucha, amasi]),
```

Aisha prepares tagine.

```
    member([aisha, tagine, _], Solution),
```

Emma brings amasi.

```
    member([emma, _, amasi], Solution),
```

The chef who prepares frybread brings tonic.

```
    member([_, frybread, tonic], Solution),
```

Mei brings lassi.

```
    member([mei, DishLassi, lassi], Solution),
```

The chef who brings the lassi did not cook the biryani.

```
    dif(DishLassi, biryani),
```

Winona does not prepare pad thai.

```
    member([winona, DishWinona, _], Solution),
    dif(DishWinona, pad_thai),
    !.
```

```
beverage(Chef, Beverage)
```

garden_party.pl

```
    beverage(Chef, Beverage) :-
        solve(Solution),
        member([Chef, _, Beverage], Solution),
        !.
```

```
dish(Chef, Dish)
```

garden_party.pl

```
dish(Chef, Dish) :-  
  solve(Solution),  
  member([Chef, Dish, _], Solution),  
  !.
```