

1. Bars which sell Michelob Amber Bock or Budweiser

Query:

```
select bar
from sells
where sells.beer = "Michelob Amber Bock" or sells.beer = "Budweiser";
```

Result:

Britannia Arms
Cabana
Caravan
Club 175
Coconut Willie's Cocktail Lounge
Gecko Grill
Seven Bamboo
The Blank Club
The Shark and Rose
The B-Hive

2. Drinkers who like some beers other than Budweiser (they do not have to like Budweiser)

Query:

```
select drinker
from likes
where beer <> 'Budweiser'
group by drinker;
```

Result:

Jesse
John
Mike

3. Beers other than Hefeweizen which are served by Gecko Grill Bar

Query:

```
select beer
from sells
where bar = 'Gecko Grill' AND beer <> 'Hefeweizen';
```

Result:

Budweiser

4. Bars who serve some beers which John likes

Query:

```
select distinct bar
from sells
where sells.beer in
    (select beer
     from likes
```

```
where drinker = 'John')
```

Or

```
select sells.bar
from sells, likes
where sells.beer = likes.beer AND likes.drinker='John'
```

Result:

Blue Tattoo
Britannia Arms
Cabana
Caravan
Club 175
Coconut Willie's Cocktail Lounge
Gecko Grill
Giza Hookah Lounge
Seven Bamboo
The Backbeat
The Blank Club
The Shark and Rose

5. Drinkers who frequent bars which serve Original Premium Lager Dog

Query:

```
select frequents.drinker
from frequents, sells
where frequents.bar = sells.bar and sells.beer = 'Original Premium Lager Dog'
```

Or

```
select distinct drinker
from frequents
where frequents.bar in
    (select bar
     from sells
     where sells.beer = 'Original Premium Lager Dog')
```

Result:

Bob
Erik
Herb
Jesse
John
Justin
Mike
Rebecca
Tom
Vince

6. Bars which are frequented by John or Rebecca but not by both of them

Query:

```
select distinct bar
from frequents
where bar IN (
    select distinct f.bar
    from frequents f
    where f.drinker = 'John' or f.drinker = 'Rebecca')
and bar NOT IN(
    select distinct f1.bar
    from frequents f1, frequents f2
    where f1.bar = f2.bar and f1.drinker = 'John' and f2.drinker= 'Rebecca')
```

Result:

Caravan
Coconut Willie's Cocktail Lounge
Gecko Grill

7. Drinkers who frequent at least three bars

Query:

```
select drinker
from frequents
group by drinker
having count(bar) > 2
```

OR

```
select distinct f1.drinker
from frequents f1, frequents f2, frequents f3
where (f1.drinker = f2.drinker AND f2.drinker = f3.drinker) AND
      (f1.bar <> f2.bar AND f1.bar <> f3.bar AND f2.bar <> f3.bar)
```

Result:

Mike
Rebecca

8. Drinkers who frequent bars which sell some beer they like

Query:

```
select distinct frequents.drinker
from frequents, sells, likes
where frequents.bar = sells.bar AND sells.beer = likes.beer AND
likes.drinker = frequents.drinker
```

Result:

Jesse
John
Mike

9. Beers which are served by bars which John frequents

Query:

```
select distinct s.beer
from frequents f, sells s
where f.bar = s.bar and f.drinker = 'John'
```

OR

```
select beer
from sells
where sells.bar IN
    (select bar
     from frequents
     where frequents.drinker = 'John')
```

Result:

Hefeweizen Doppelbock
Original Premium Lager Dog
Budweiser

10. Bars which serve some beers which John or Rebecca like and which are cheaper than \$5

Query:

```
Select distinct s.bar
from sells s, likes l
where s.beer = l.beer and (l.drinker = 'John' OR l.drinker = 'Rebecca') and
s.price < 5
```

OR

```
select distinct bar
from sells
where sells.price < 5 AND sells.beer IN
    (select beer
     from likes
     where likes.drinker = 'Rebecca' OR likes.drinker = 'John')
```

Result:

Club 175
Coconut Willie's Cocktail Lounge
Gecko Grill
Seven Bamboo
The Shark and Rose
The Backbeat

11. Bars which serve some beers which Mike likes or which John likes

Query:

```
Select distinct s.bar
from sells s, likes l
where s.beer = l.beer and (l.drinker = 'John' OR l.drinker = 'Mike')
```

OR

```
Select distinct bar
from sells
where sells.beer IN
      (select beer
       from likes
       where likes.drinker = 'Mike' OR likes.drinker = 'John')
```

Result:

A.P. Stump's
Blue Angel
Blue Tattoo
Britannia Arms
Cabana
Caravan
Club 175
Coconut Willie's Cocktail Lounge
Gecko Grill
Giza Hookah Lounge
Hedley Club
Seven Bamboo
The Backbeat
The Blank Club
The Shark and Rose

12. Drinkers who like both Hefeweizen and Killian's

Query:

```
select l1.drinker
from likes l1, likes l2
where l1.drinker = l2.drinker AND l1.beer = 'Hefeweizen' AND l2.beer =
'Killian's'
```

Result:

Null

13. List all bars, beers they sell and beer prices in euros

Query:

```
select bar, beer, price*0.9 AS Price_in_Euros
from sells
```

Result:

bar	Price_in_Euros	beer	
A.P. Stump's		Hefeweizen	5.400
Blue Angel		Hefeweizen Doppelbock	4.950
Blue Angel		Original Premium Lager Dog	5.625
Blue Tattoo		Killian's	5.400
Britannia Arms		Budweiser	5.850
Cabana		Budweiser	4.500
Caravan		Budweiser	4.950
Caravan		Original Premium Lager Dog	3.150
Club 175		Budweiser	4.050
Coconut Willie's Cocktail Lounge		Budweiser	2.925
Eulipia		Hefeweizen Doppelbock	4.050
Gecko Grill		Budweiser	2.700
Giza Hookah Lounge		Stolichnaya Citrona	5.400
Hedley Club		Hefeweizen	7.200
Seven Bamboo		Budweiser	2.250
The B-Hive		Michelob Amber Bock	4.500
The Backbeat		Killian's	3.150
The Blank Club		Budweiser	4.950
The Shark and Rose		Budweiser	4.050
The Shark and Rose		Original Premium Lager Dog	4.950

14. Bars with names containing "The"

Query:

```
select name
from bars
where name like '%The%';
```

Result:

```
The B-Hive
The Backbeat
The Blank Club
The Shark and Rose
```

15. Drinkers who like Killian's and who also frequent Gecko Grill

Query:

```
select likes.drinker
from likes, frequents
where likes.drinker = frequents.drinker AND likes.beer = "Killian's" AND
frequents.bar = 'Gecko Grill'
```

Result:

```
None
```

