

1. Find all distinct drinkers whose phone numbers come from area code 917 and who like Budweiser or Bud (synonim!)

```
select distinct d.name from Drinkers d join Likes l on d.name = l.drinker where d.phone LIKE '917-%' AND l.beer = 'Bud' OR 'Budweiser';
```

Result Grid			
Filter Rows: <input type="text"/>			
Export:			
Wrap Cell Content:			
name			
Result 1 x			
Output			
Action Output			
#	Time	Action	Message
1	20:22:27	select distinct d.name from Drinkers d join Likes l on d.name = l.drinker where d.phone LIKE '917-%' AND l.beer = ...	0 row(s) returned

2. What beers does Mike like?

```
SELECT distinct beer FROM Likes Where drinker = 'Mike';
```

beer			
Blue Moon			
Bud			
Budweiser			
Creamy Dark			
Hefeweizen			
Likes 2 x			
Output			
Action Output			
#	Time	Action	Message
1	20:22:27	select distinct d.name from Drinkers d join Likes l on d.name = l.drinker where d.phone LIKE '917-%' AND l.beer = ...	0 row(s) returned
2	20:24:24	SELECT distinct beer FROM Likes Where drinker = 'Mike' LIMIT 0, 1000	9 row(s) returned

3. Which town has the most drinkers?

```
select d.city, count(*) from Drinkers d group by d.city having count(*) = (select count(*) from Drinkers d2 group by d2.city order by count(*) desc limit 1);
```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	city	count(*)			
▶	Edison	5			
	New York	5			

4. What bars are frequented by drinkers from that town (3)?

select distinct f.bar from Frequents f join Drinkers d on f.drinker = d.name where d.city = 'Edison' OR d.city = 'New York';

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	bar				
▶	Gecko Grill				
	Seven Bamboo				
	Cabana				
	Blue Angel				
	Caravan				

  

#	Time	Action	Message
✓ 1	20:22:27	select distinct d.name from Drinkers d join Likes l on d.name = l.drinker where d.phone LIKE '917-%' AND l.beer = ...	0 row(s) returned
✓ 2	20:24:24	SELECT distinct beer FROM Likes Where drinker = 'Mike' LIMIT 0, 1000	9 row(s) returned
✓ 3	20:25:52	select d.city, count(*) from Drinkers d group by d.city having count(*) = (select count(*) from Drinkers d2 group by ...	2 row(s) returned
✓ 4	20:27:10	select distinct f.bar from Frequents f join Drinkers d on f.drinker = d.name where d.city = 'Edison' OR d.city = 'New ...	8 row(s) returned

5. Provide all bars which serve beers that Mike likes

select distinct s.bar from Sells s, (SELECT l.beer FROM Likes l WHERE l.drinker = 'Mike') a where s.beer = a.beer;

Result Grid				Filter Rows:	Export:	Wrap Cell Content:
bar						
A.P. Stump's						
Blue Angel						
Blue Tattoo						
Britannia Arms						
Cabana						

  

Result 5			
Output			
Action Output			
#	Time	Action	Message
1	20:22:27	select distinct d.name from Drinkers d join Likes l on d.name = l.drinker where d.phone LIKE '917-%' AND l.beer = ...	0 row(s) returned
2	20:24:24	SELECT distinct beer FROM Likes Where drinker = 'Mike' LIMIT 0, 1000	9 row(s) returned
3	20:25:52	select d.city, count(*) from Drinkers d group by d.city having count(*) = (select count(*) from Drinkers d2 group by ...	2 row(s) returned
4	20:27:10	select distinct f.bar from Frequents f join Drinkers d on f.drinker = d.name where d.city = 'Edison' OR d.city = 'New...	8 row(s) returned
5	20:28:15	select distinct s.bar from Sells s, (SELECT l.beer FROM Likes l WHERE l.drinker = 'Mike') a where s.beer = a.beer...	15 row(s) returned

6. Who likes the at least one same beer that Joe or Mike like?

select distinct l1.drinker from Likes l1, Likes l2 where l1.beer = l2.beer AND l1.drinker != 'Joe' AND l1.drinker != 'Mike';

Result Grid				Filter Rows:	Export:	Wrap Cell Content:
drinker						
John						
Justin						
Devarsh						
Yuhan						
Vince						

  

Result 6			
Output			
Action Output			
#	Time	Action	Message
2	20:24:24	SELECT distinct beer FROM Likes Where drinker = 'Mike' LIMIT 0, 1000	9 row(s) returned
3	20:25:52	select d.city, count(*) from Drinkers d group by d.city having count(*) = (select count(*) from Drinkers d2 group b...	2 row(s) returned
4	20:27:10	select distinct f.bar from Frequents f join Drinkers d on f.drinker = d.name where d.city = 'Edison' OR d.city = 'N...	8 row(s) returned
5	20:28:15	select distinct s.bar from Sells s, (SELECT l.beer FROM Likes l WHERE l.drinker = 'Mike') a where s.beer = a.b...	15 row(s) returned
6	20:28:58	select distinct l1.drinker from Likes l1, Likes l2 where l1.beer = l2.beer AND l1.drinker != 'Joe' AND l1.drinker != '...	8 row(s) returned

7. All bars which sell at last one beer which is liked by at least one drinker who frequents these bars

select distinct s.bar from Sells s join Likes l on s.beer = l.beer join Frequents f on f.bar = s.bar where s.beer = l.beer AND s.bar = f.bar AND l.drinker = f.drinker;

Result Grid				Filter Rows:	Export:	Wrap Cell Content:
bar						
Caravan						
Cabana						
The Shark and Rose						
A.P. Stump's						
Blue Angel						

  

Result 7			
Output			
Action Output			
#	Time	Action	Message
3	20:25:52	select d.city, count(*) from Drinkers d group by d.city having count(*) = (select count(*) from Drinkers d2 group b...	2 row(s) returned
4	20:27:10	select distinct f.bar from Frequents f join Drinkers d on f.drinker = d.name where d.city = 'Edison' OR d.city = 'N...	8 row(s) returned
5	20:28:15	select distinct s.bar from Sells s, (SELECT l.beer FROM Likes l WHERE l.drinker = 'Mike') a where s.beer = a.b...	15 row(s) returned
6	20:28:58	select distinct l1.drinker from Likes l1, Likes l2 where l1.beer = l2.beer AND l1.drinker != 'Joe' AND l1.drinker != '...	8 row(s) returned
7	20:29:42	select distinct s.bar from Sells s join Likes l on s.beer = l.beer join Frequents f on f.bar = s.bar where s.beer = l.b...	7 row(s) returned

#### 8. Drinkers who like some beers sold by Caravan bar

select distinct l.drinker from Likes l where l.beer in (select s.beer from Sells s where s.bar = 'Caravan');

Result Grid				Filter Rows:	Export:	Wrap Cell Content:
rinker						
John						
Mike						
Vince						
Jesse						
Justin						

  

Likes 8			
Output			
Action Output			
#	Time	Action	Message
4	20:27:10	select distinct f.bar from Frequents f join Drinkers d on f.drinker = d.name where d.city = 'Edison' OR d.city = 'N...	8 row(s) returned
5	20:28:15	select distinct s.bar from Sells s, (SELECT l.beer FROM Likes l WHERE l.drinker = 'Mike') a where s.beer = a.b...	15 row(s) returned
6	20:28:58	select distinct l1.drinker from Likes l1, Likes l2 where l1.beer = l2.beer AND l1.drinker != 'Joe' AND l1.drinker != '...	8 row(s) returned
7	20:29:42	select distinct s.bar from Sells s join Likes l on s.beer = l.beer join Frequents f on f.bar = s.bar where s.beer = l.b...	7 row(s) returned
8	20:30:11	select distinct l.drinker from Likes l where l.beer in (select s.beer from Sells s where s.bar = 'Caravan') LIMIT 0, ...	8 row(s) returned

#### 9. Bars which sell Budweiser and are frequented by some drinkers who like Budweiser

select distinct s.bar from Sells s right join (select f.bar from Frequents f, (select l.drinker from Likes l where l.beer = 'Budweiser') a where f.drinker = a.drinker) b on s.bar = b.bar where s.beer = 'Budweiser';

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

bar
Cabana
Caravan
The Shark and Rose
Gecko Grill
Seven Bamboo

Result 9 x

Output

Action Output

#	Time	Action	Message
5	20:28:15	select distinct s.bar from Sells s, (SELECT l.beer FROM Likes l WHERE l.drinker = 'Mike') a where s.beer = a.b...	15 row(s) returned
6	20:28:58	select distinct l1.drinker from Likes l1, Likes l2 where l1.beer = l2.beer AND l1.drinker != 'Joe' AND l1.drinker != '...	8 row(s) returned
7	20:29:42	select distinct s.bar from Sells s join Likes l on s.beer = l.beer join Frequents f on f.bar = s.bar where s.beer = l.b...	7 row(s) returned
8	20:30:11	select distinct l.drinker from Likes l where l.beer in (select s.beer from Sells s where s.bar = 'Caravan') LIMIT 0, ...	8 row(s) returned
9	20:30:39	select distinct s.bar from Sells s right join (select f.bar from Frequents f, (select l.drinker from Likes l where l.beer ...	5 row(s) returned

10. Bars which are frequented by Mike and Steve

select bar from Frequents where drinker = 'Mike' and drinker = 'Steve';

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

bar
-----

Frequents 10 x

Output

Action Output

#	Time	Action	Message
6	20:28:58	select distinct l1.drinker from Likes l1, Likes l2 where l1.beer = l2.beer AND l1.drinker != 'Joe' AND l1.drinker != '...	8 row(s) returned
7	20:29:42	select distinct s.bar from Sells s join Likes l on s.beer = l.beer join Frequents f on f.bar = s.bar where s.beer = l.b...	7 row(s) returned
8	20:30:11	select distinct l.drinker from Likes l where l.beer in (select s.beer from Sells s where s.bar = 'Caravan') LIMIT 0, ...	8 row(s) returned
9	20:30:39	select distinct s.bar from Sells s right join (select f.bar from Frequents f, (select l.drinker from Likes l where l.beer ...	5 row(s) returned
10	20:31:20	select bar from Frequents where drinker = 'Mike' and drinker = 'Steve' LIMIT 0, 1000	0 row(s) returned

11. Drinker who like at least two beers that Mike likes

select distinct l.drinker from Likes l join Likes l2 on l.drinker = l2.drinker where l.beer != l2.beer  
AND l.beer in (select l3.beer from Likes l3 where l3.drinker = 'Mike') AND l2.beer in (select  
l4.beer from Likes l4 where l4.drinker = 'Mike') AND l.drinker != 'Mike';

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

IA

drinker

John

Justin

Gunjan

Yuhan

Result 11

×

Output

Action Output

#	Time	Action	Message
7	20:29:42	select distinct s.bar from Sells s join Likes l on s.beer = l.beer join Frequents f on f.bar = s.bar where s.beer = l.b...	7 row(s) returned
8	20:30:11	select distinct l.drinker from Likes l where l.beer in (select s.beer from Sells s where s.bar = 'Caravan') LIMIT 0, ...	8 row(s) returned
9	20:30:39	select distinct s.bar from Sells s right join (select f.bar from Frequents f, (select l.drinker from Likes l where l.beer ...	5 row(s) returned
10	20:31:20	select bar from Frequents where drinker = 'Mike' and drinker = 'Steve' LIMIT 0, 1000	0 row(s) returned
11	20:31:55	select distinct l.drinker from Likes l join Likes l2 on l.drinker = l2.drinker where l.beer != l2.beer AND l.beer in (sel...	4 row(s) returned

## 12. Bars which sell at least 3 beers that Mike likes (do not use COUNT)

```
select distinct s.bar from Sells s join Sells s2 on s.bar = s2.bar join Sells s3 on s.bar = s3.bar
AND s2.bar = s3.bar where s.beer != s2.beer AND s.beer != s3.beer AND s2.beer != s3.beer
AND s.beer in (select l.beer from Likes l where l.drinker = 'Mike') AND s2.beer in (select l2.beer
from Likes l2 where l2.drinker = 'Mike') AND s3.beer in (select l3.beer from Likes l3 where
l3.drinker = 'Mike');
```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

bar

Caravan

Result 12

Output

Action Output

#	Time	Action	Message
8	20:30:11	select distinct l.drinker from Likes l where l.beer in (select s.beer from Sells s where s.bar = 'Caravan') LIMIT 0, ...	8 row(s) returned
9	20:30:39	select distinct s.bar from Sells s right join (select f.bar from Frequents f, (select l.drinker from Likes l where l.beer ...	5 row(s) returned
10	20:31:20	select bar from Frequents where drinker = 'Mike' and drinker = 'Steve' LIMIT 0, 1000	0 row(s) returned
11	20:31:55	select distinct l.drinker from Likes l join Likes l2 on l.drinker = l2.drinker where l.beer != l2.beer AND l.beer in (sel...	4 row(s) returned
12	20:32:26	select distinct s.bar from Sells s join Sells s2 on s.bar = s2.bar join Sells s3 on s.bar = s3.bar AND s2.bar = s3.ba...	1 row(s) returned