

1. Get the businesses in Providence, RI. Results should be sorted by review counts in descending order. Return top 7 businesses.

```
select business.id, business.name, business.full_address, business.review_count,  
business.photo_url, business.stars  
from business  
where city = 'Providence' and state = 'RI'  
order by review_count desc  
LIMIT 7
```

2. Get the businesses from 1 but are still open. Return top 7 businesses.

```
select business.id, business.name, business.full_address, business.review_count,  
business.photo_url, business.stars  
from business  
where business.open = 1 and city = 'Providence' and state = 'RI'  
order by review_count desc  
LIMIT 7
```

2. Get the reviews for a particular business, given the business ID. Results should be sorted by the review's useful vote counts in descending order. Return top 7 reviews.

```
select review.user_id, user.name, review.stars, review.text  
from user natural join review as a  
where business.id = ?  
and review.user_id = user.id  
order by useful_votes desc  
LIMIT 7
```

3. Get the businesses in Providence, RI that have the highest percentage of five star reviews, and have been reviewed at least 20 times. Results should be ordered by the percentage in descending order. Return top 7 businesses.

```
select id, name, full_address, review_count, photo_url, stars, percentage  
from business natural join  
  (select business_id as id, five_star *100/ all_review as percentage  
   from  
     ((select business_id, count(text) as five_star  
      from review where stars = 5 group by business_id)  
     natural join  
     (select business_id, count(text) as all_review from review group by business_id))  
   where all_review > 20 )  
where city = 'Providence' and state = 'RI'
```

```
order by percentage desc  
LIMIT 7
```

4. Look up business by name/tag

```
select business.name, business.neighborhood, business.full_address, business.city,  
business.state, business.review_count, business.photo_url, business.stars, business.is_open,  
from business  
where business.name = ?  
order by review_count desc  
LIMIT 7
```

5. Look up distance to a business by name/tag(manhattan distance)

```
SELECT name, latitude, longitude, location FROM (  
  SELECT business.name, business.latitude, business.longitude, abs(business.latitude-100) +  
abs(business.longitude-(-118)) AS location  
  FROM business  
) AS x  
WHERE location > -40  
order by location asc  
limit 20
```