

For my project to tell if a company is popular I will use a couple of metrics to show that a particular business in a zip code is either successful or popular.

To show that a business is successful I will use how many reviews the business has gotten and the review rating as well. I will find the average number of reviews and rating each for the particular zip code we are looking at along with the specific business category we are looking at and with that information it should return a list of companies that fit the requirement in descending order. Below I provide the code that will help me, for this sample I hardcoded the category and zipcode I was looking for. In the actual application this will be a little different to allow for easy changing.

– Successful Query Code

```
SELECT
    b.name,
    b.reviewrating,
    b.reviewcount,
    b.city,
    b.postal_code,
    AVG(reviewcount) AS avgCount,
    AVG(reviewrating) AS myrate,
    c.cat_name
From
    business AS b
INNER JOIN
    categories AS c ON b.business_id = c.business_id
WHERE
    postal_code = '85251' AND
    cat_name = 'Shopping' AND
    b.reviewcount >= (SELECT AVG(reviewcount) FROM business WHERE postal_code =
'85251') AND
    b.reviewrating >= ((SELECT AVG(reviewrating) FROM business WHERE postal_code =
'85251'))
GROUP BY
    b.name, b,reviewrating, b.city, b.postal_code, b.reviewcount,c.cat_name
ORDER BY
    b.reviewrating DESC
```

With this code I was able to retrieve only one business that fit the specifications for these requirements. I provided the file with the data under succesful_sample.csv.

As for how to tell if a business is popular I used a similar metric but in this case I used the number of checkins total the business has received. As before I narrow the search down to a specific zip code and category I am searching for. Once I've done that I will take the average amount of check-ins from all the businesses and only return the ones with a count that is greater or equal to the average. I also provided the following code showing how I came to my conclusion.

– Popular Query Code

```
SELECT
    b.name,
    b.numcheckins,
    b.city,
    b.postal_code,
    c.cat_name
From
    business AS b
INNER JOIN
    categories AS c ON b.business_id = c.business_id
WHERE
    postal_code = '85251' AND
    cat_name = 'Shopping' AND
    numcheckins >= (SELECT AVG(numcheckins) FROM business WHERE postal_code =
'85251')
GROUP BY
    b.name,b.numcheckins,b.city,b.postal_code,c.cat_name
ORDER BY
    b.numcheckins DESC;
```

When I entered a query for this code I also received one business that met the requirements. I provided the data file under the name popular_sample.csv