3. Use the **accounts** table and a **CASE** statement to create two groups: one group of company names that start with a number and a second group of those company names that start with a letter. What proportion of company names start with a letter?

4. Consider vowels as `a`, `e`, `i`, `o`, and `u`. What proportion of company names start with a vowel, and what percent start with anything else?

Input

HISTORY MENU

SCHEMA

- accounts
- orders
- region
- sales_reps
- web_events

```
1  SELECT SUM(number) num,SUM(letter) let FROM
2  (SELECT a.name,CASE WHEN LEFT(a.name,1) IN
   ('0','1','2','3','4','5','6','7','8','9') THEN 1
   ELSE 0 END AS number,CASE WHEN LEFT (a.name,1) IN
   ('0','1','2','3','4','5','6','7','8','9') THEN 0
   ELSE 1 END AS letter
3  FROM accounts a
4  GROUP BY a.name)t1
```

Success! EVALUATE

Output 1 results Download CSV

num	let
1	350

4. Consider vowels as `a`, `e`, `i`, `o`, and `u`. What proportion of company names start with a vowel, and what percent start with anything else?

Input HISTORY MENU

SCHEMA

- accounts
- orders
- region
- sales_reps
- web_events

```
SELECT ((SUM(vowels))*100/COUNT(*)) vow,
((SUM(not_vowels))*100/COUNT(*)) not_vow FROM
(SELECT CASE WHEN LEFT(a.name,1) IN
('A','E','I','O','U') THEN 1 ELSE 0 END AS
vowels,CASE WHEN LEFT (a.name,1) IN
('A','E','I','O','U') THEN 0 ELSE 1 END AS
not_vowels
```

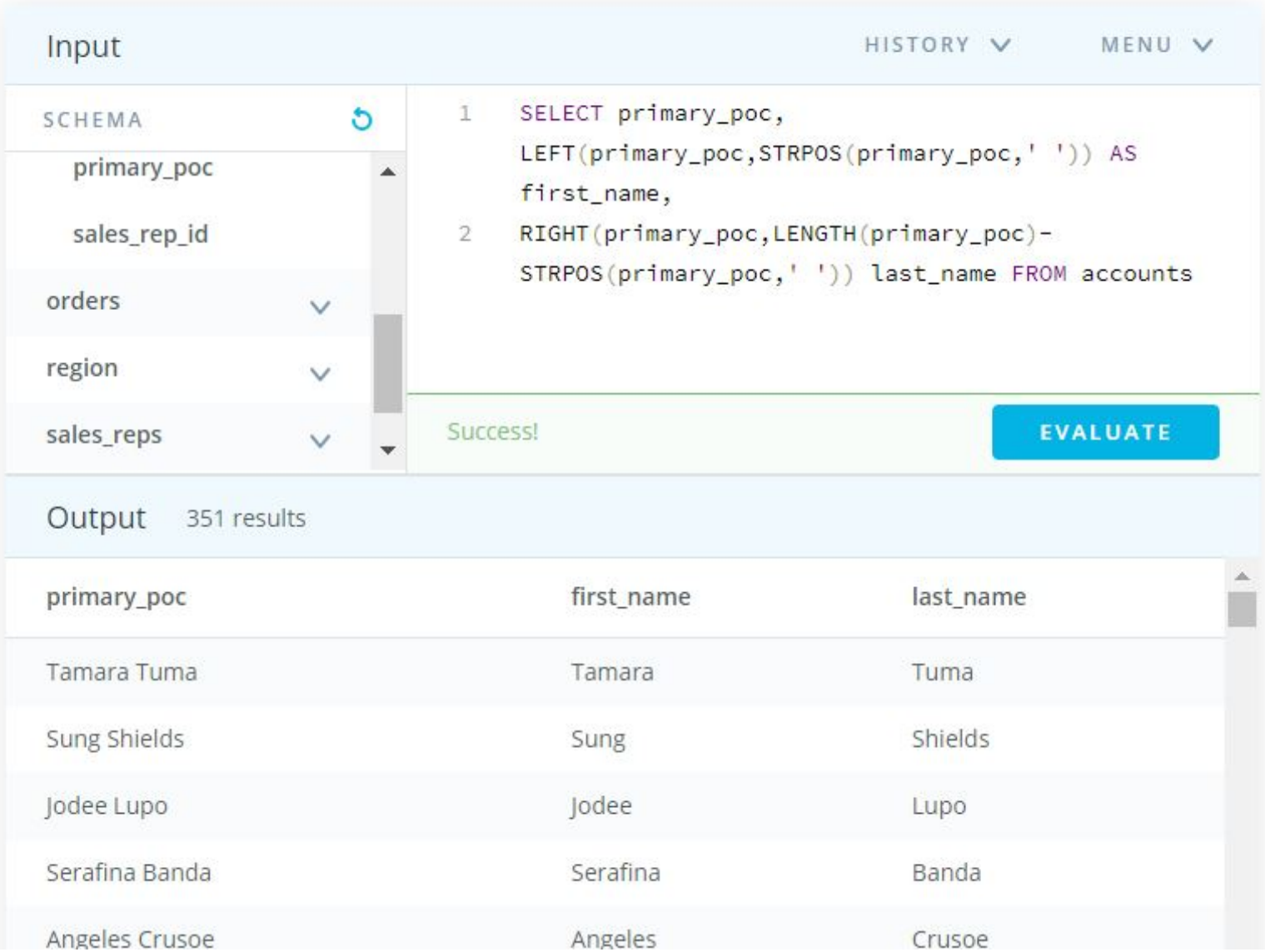
Success! EVALUATE

Output 1 results Download CSV

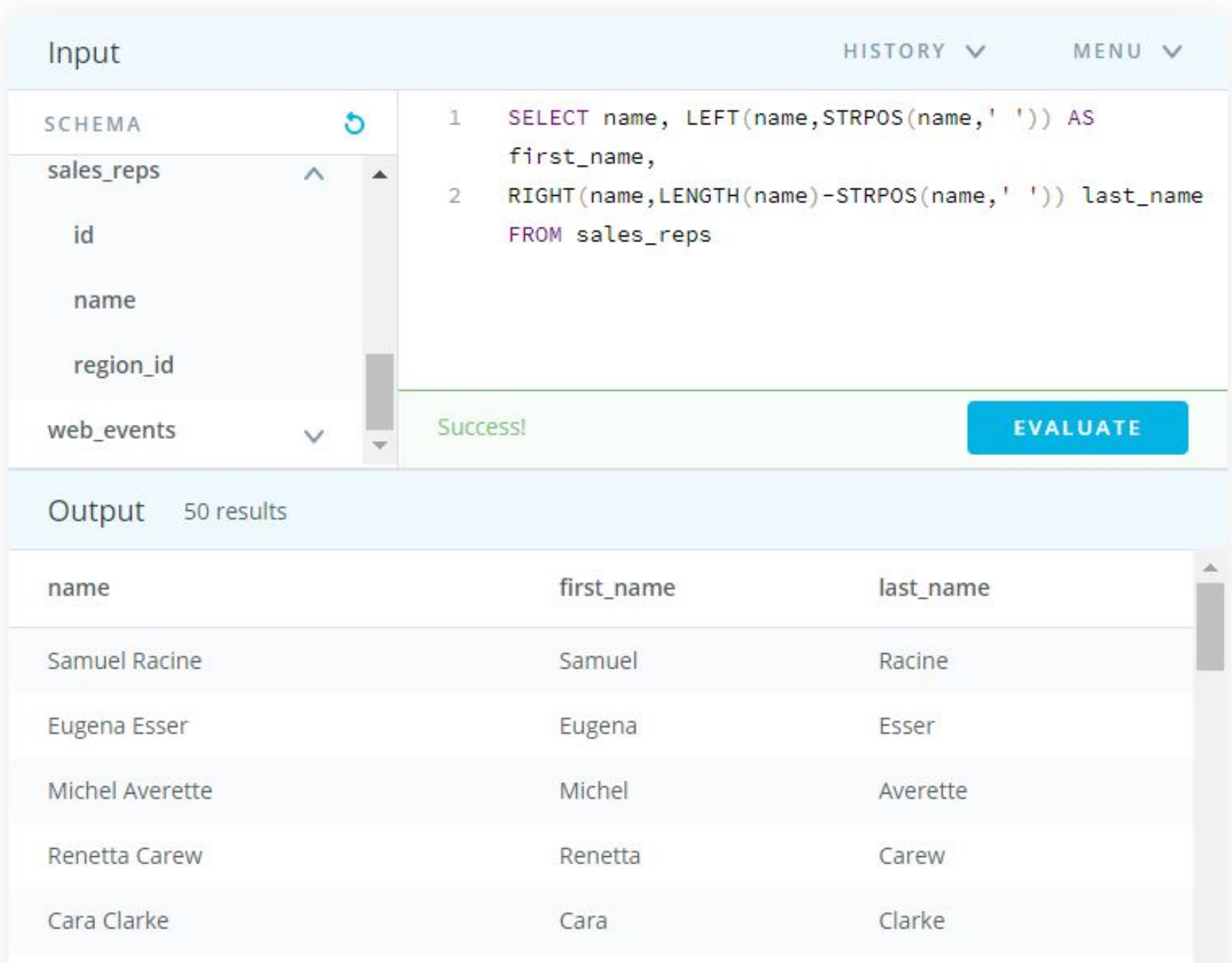
vow	not_vow
22	77

1. Use the `accounts` table to create **first** and **last** name columns that hold the first and last names for the `primary_poc`.

2. Now see if you can do the same thing for every rep `name` in the `sales_reps` table. Again provide **first** and **last** name columns.



2. Now see if you can do the same thing for every rep `name` in the `sales_reps` table. Again provide **first** and **last** name columns.



Each company in the accounts table wants to create an email address for each primary_poc. The email address should be the first name of the primary_poc . last name primary_poc @ company name .com.

You may have noticed that in the previous solution some of the company names include spaces, which will certainly not work in an email address. See if you can create an email address that will work by removing all of the spaces in the account name, but otherwise your solution should be just as in question 1. Some helpful documentation is here.

We would also like to create an initial password, which they will change after their first log in. The first password will be the first letter of the primary_poc's first name (lowercase), then the last letter of their first name (lowercase), the first letter of their last name (lowercase), the last letter of their last name (lowercase), the number of letters in their first name, the number of letters in their last name, and then the name of the company they are working with, all capitalized with no spaces.

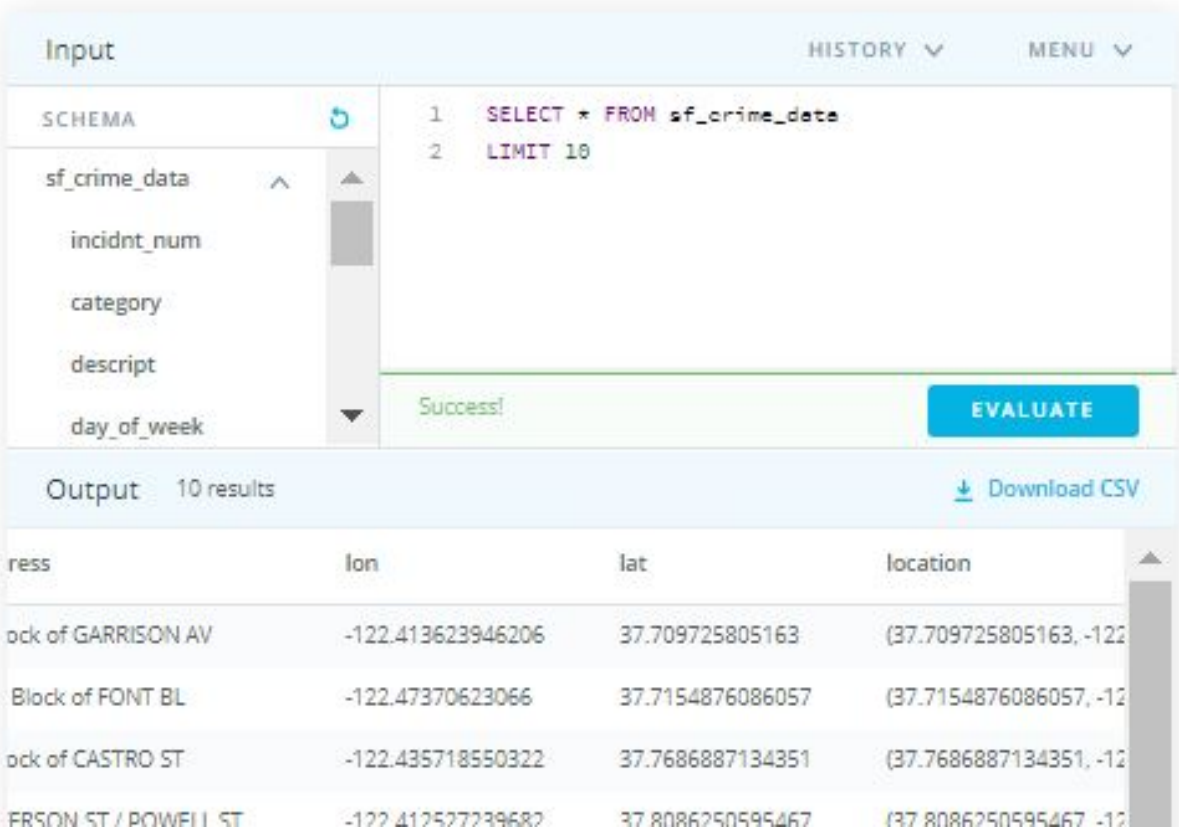
```
WITH t1 AS (SELECT
        LEFT(LOWER(primary_poc),STRPOS(primary_poc,' ')-1) first_name,
        RIGHT(LOWER(primary_poc),LENGTH(primary_poc)-STRPOS(primary_poc,' ')) Last_name,
                LOWER(name) email
                FROM accounts)

SELECT (first_name||'.'||Last_name||'@'||REPLACE(email,' ','')||'.com') email,
(LEFT(first_name,1)||RIGHT(first_name,1)||LEFT(Last_name,1)||RIGHT(Last_name,1)||LENGTH(first_name)||LENGTH(Last_name)||email)
FROM t1
```

Tasks to complete:

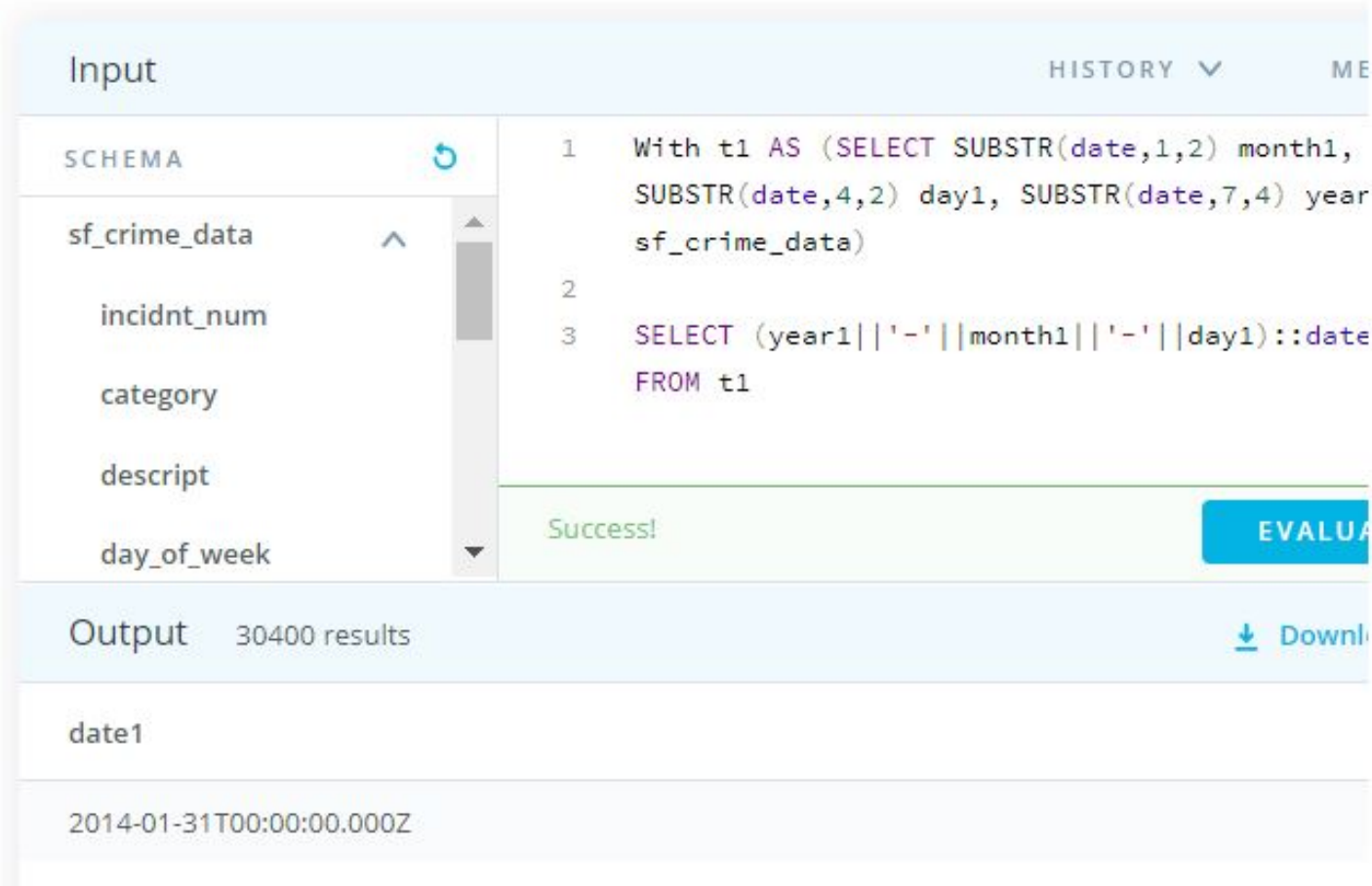
- [x] `1.` Write a query to look at the top 10 rows to understand the columns and the raw data in the dataset called `sf_crime_data`.
- [ ] `2.` Remembering back to the lesson on dates, use the **Quiz Question** at the bottom of this page to make sure you remember the format that dates should use in SQL.
- [ ] `3.` Look at the `date` column in the **sf_crime_data** table. Notice the date is not in the correct format.
- [ ] `4.` Write a query to change the date into the correct SQL date format. You will need to use at least **SUBSTR** and **CONCAT** to perform this operation.
- [ ] `5.` Once you have created a column in the correct format, use either `CAST` or `::` to convert this to a date.

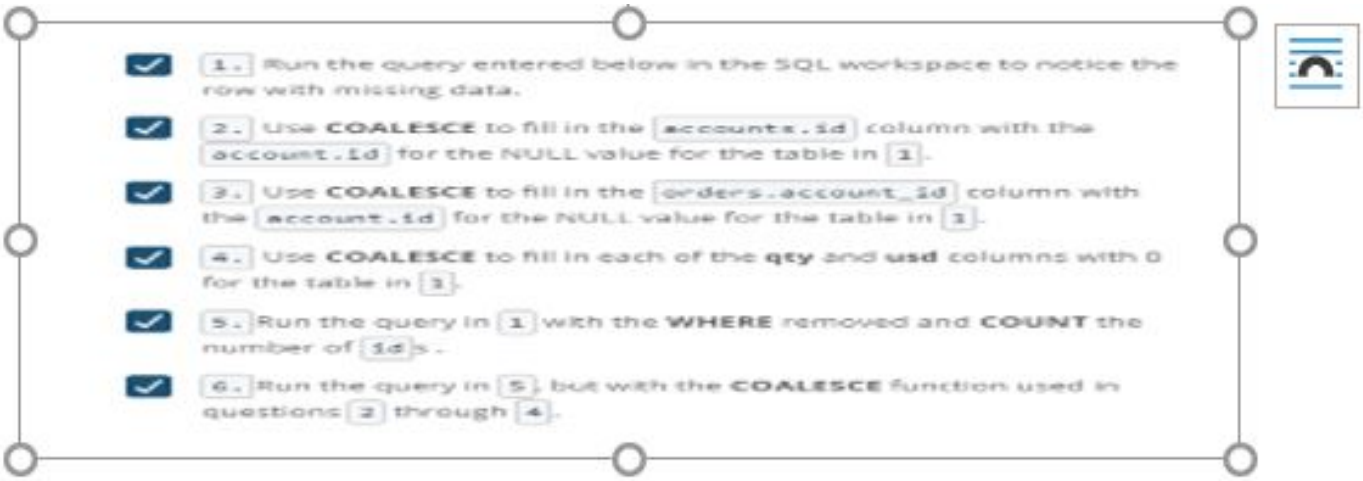
Note: If the proper tables for this SF Crime Data database do not appear for some reason in the Schema below, you can fix this using the Menu in the lower left of the workspace. Make sure you have first saved any query you have entered, then click on Menu, then choose Reset Data, and type in "Reset Data" as directed. This will definitely bring up the proper schema tables for the SF Crime Data database.



- [x] `3.` Look at the `date` column in the **sf_crime_data** table. Notice the date is not in the correct format.
- [x] `4.` Write a query to change the date into the correct SQL date format. You will need to use at least **SUBSTR** and **CONCAT** to perform this operation.
- [x] `5.` Once you have created a column in the correct format, use either `CAST` or `::` to convert this to a date.

Note: If the proper tables for this SF Crime Data database do not appear for some reason in the Schema below, you can fix this using the Menu in the lower left of the workspace. Make sure you have first saved any query you have entered, then click on Menu, then choose Reset Data, and type in "Reset Data" as directed. This will definitely bring up the proper schema tables for the SF Crime Data database.





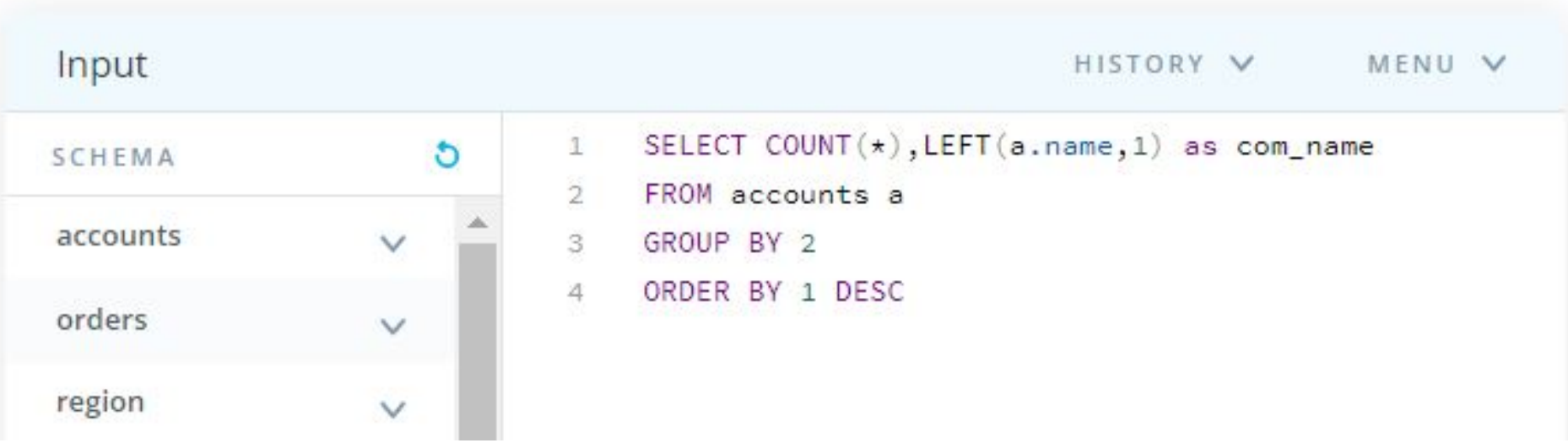

```
WITH t1 AS      (SELECT COALESCE(o.id,a.id) fill_id,
                a.name,a.website,a.lat,a.long,a.primary_poc,a.sales_rep_id, o.occurred_at ,
                COALESCE(o.account_id, a.id) orders_fill_id,
                COALESCE(o.standard_qty,0) fill_std,
                COALESCE(o.gloss_qty,0) fill_goss,
                COALESCE(o.poster_qty,0) fill_poster,
                COALESCE(o.total,0) fill_total,
                COALESCE(o.standard_amt_usd,0) fill_std_amt,
                COALESCE(o.gloss_amt_usd,0) fill_gloss_amt,
                COALESCE(o.poster_amt_usd,0) fill_poster_amt,
                COALESCE(o.total_amt_usd,0) fill_tot_amt
                FROM accounts a
                LEFT JOIN orders o
                ON a.id = o.account_id)

select count(*) from t1
```

2. There is much debate about how much the name **(or even the first letter of a company name)** matters. Use the **accounts** table to pull the first letter of each company name to see the distribution of company names that begin with each letter (or number).

3. Use the **accounts** table and a **CASE** statement to create two groups: one group of company names that start with a number and a second group of those company names that start with a letter. What proportion of company names start with a letter?

4. Consider vowels as `a`, `e`, `i`, `o`, and `u`. What proportion of company names start with a vowel, and what percent start with anything else?



1. In the **accounts** table, there is a column holding the **website** for each company. The last three digits specify what type of web address they are using. A list of extensions (and pricing) is provided **here**. Pull these extensions and provide how many of each website type exist in the **accounts** table.

2. There is much debate about how much the name **(or even the first letter of a company name)** matters. Use the **accounts** table to pull the first letter of each company name to see the distribution of company names that begin with each letter (or number).

3. Use the **accounts** table and a **CASE** statement to create two groups: one group of company names that start with a number and a second group of those company names that start with a letter. What proportion of company names start with a letter?

4. Consider vowels as `a`, `e`, `i`, `o`, and `u`. What proportion of company names start with a vowel, and what percent start with anything else?

Input HISTORY MENU

SCHEMA

accounts
orders
region
sales_reps
web_events

```
1  SELECT COUNT(*),RIGHT(a.website,3) as ext
2  FROM accounts a
3  GROUP BY ext
4  ORDER BY 1 DESC
```

Success! EVALUATE

Output 3 results Download CSV

count	ext
349	com
1	net
1	org