Milestone 2 | Crunchbase Investments

INTRODUCTION: Crunchbase is a platform that provides information and news on companies and investors, primarily in the startup and technology space. Over the past decade, it has become a popular business tool and a vital resource for entrepreneurs and those trying to assess startup companies.

Startups hardly ever go it alone. They need investors to give them money in order to develop their products, expand, and build enough momentum to be successful. For this Milestone, you've been hired by a global venture capital firm eager to invest in industry-changing startup companies.

HOW IT WORKS: Follow the prompts in the questions below to investigate your data. Post your answers in the provided boxes: the **yellow boxes** for the queries you write, and **blue boxes** for text-based answers. When you're done, export your document as a pdf file and submit it on the Milestone page – see instructions for creating a PDF at the end of the Milestone.

RESOURCES: If you need hints on the Milestone or are feeling stuck, there are multiple ways of getting help. Attend Drop-In Hours to work on these problems with your peers, or reach out to the HelpHub if you have questions. Good luck!

PROMPT: You'll use your SQL skills to explore a Crunchbase data set about the funding different companies received. This exploration will help your firm take the first step in understanding the startup funding landscape for their own investments.

SQL App: Here's that link to our specialized SQL app, where you'll write your SQL queries and interact with the data.

— Data Set **Description**

Your first step in any data project is to understand the data at your disposal. The Crunchbase "company investments" data set (`crunchbase.companies`) is a single table with 20 columns and over 27 000 rows.

Here are columns that you'll be using in this Milestone:

- **`name`** - Company's name.
- **`category_code`** - The company's main industry, market, or business area.
- **`status`** - The company's status. Can be "operating", "ipo", "acquired", or "closed".
- **`funding_total_usd`** - Total funding received by the company over their entire existence. Many of the later numeric columns in the dataset break down this total into component sources.

— **Task 1:** Top Funded Companies

A. Write a query that returns the **`name`**, **`category_code`**, **`status`**, and **`funding_total_usd`** for the twelve companies with the highest amount of funding. HINT: You might need to include something to handle `NULL` in the funding column!

```
SELECT name, category_code, status, funding_total_usd
FROM crunchbase.companies
WHERE funding_total_usd is NOT NULL
ORDER BY funding_total_usd DESC
LIMIT 12;
```

B. Check the data returned from your query. What is the name of the company with the highest funding?

Clearwire

C. Compare the funding received by the top-funded company and the twelfth-most-funded company (at the end of the output). How much more did the number 1 company receive? Calculate your answer in terms of the ratio, by dividing the larger amount by the smaller amount; you don't need to do that calculation with a query.

```
5,700,000,000/1,000,000,000= 5.7
```

D. How many companies in the top twelve have a listed status of 'acquired' rather than 'operating' or 'ipo'? NOTE: you do not need to write a SQL query to answer this question!

Acquired: 1
Operating: 5
Ipo: 6

— **Task 2:** Top Closed Companies

Among the top twelve companies, there were none that were listed as 'closed', meaning the company has stopped operating. Let's focus on companies with that status next.

A. Modify your query from Task 1A to look at only companies with a status of 'closed'. In other words, retrieve the twelve companies which received the most funding but whose status is closed. Paste your query below.

```
SELECT name, category_code, status, funding_total_usd
FROM crunchbase.companies
WHERE funding_total_usd IS NOT NULL AND status = 'closed'
```

```
ORDER BY funding_total_usd DESC
LIMIT 12;
```

B. What is the name of the company with the highest funding that closed down?

Abound Solar

C. How much funding did they receive?

510000000

D. The ‘cleantech’ category shows up multiple times in the top twelve. How many of the closed companies in the top twelve come from this category? NOTE: you do not need to write a SQL query to answer this question!

6

— **Task 3:** Deeper into Clean Technology

The fact that a lot of highly-funded companies that have a status of ‘closed’ came from cleantech seems like an interesting thread to pull at, so let’s look at them a bit more.

A. Let's take a step back first. Write a query that returns the **`name`**, **`category_code`**, and **`status`** of companies with the 'cleantech' category code. How many companies have 'cleantech' as the main market category? Use the information bar above the output to see the number of rows in the output.

```
SELECT name, category_code, status
FROM crunchbase.companies
WHERE category_code = 'cleantech'
```

898

B. About 7.9% of all companies in the full data table are listed with a 'closed' status. Add an additional condition to your query to only look at closed, 'cleantech' companies. What percentage of 'cleantech' companies have a closed status, and how does this compare to the data as a whole? HINT: You'll need to use your answer from 3A.

```
SELECT name, category_code, status
FROM crunchbase.companies
WHERE category_code = 'cleantech' AND status = 'closed';
```

63 out of 898 are closed. ~7.01%

— Level Up

A. To close things out, let's be a little creative and look at company names just for fun. How many 'cleantech' category companies have 'solar', 'power', or 'energy' in their names? HINT: Your filter conditions should use the `ILIKE` keyword and the wildcard character (%). Make sure to double check your use of parentheses to determine the order the `AND` and `OR` keywords are evaluated. If done correctly, your query will return 275 rows.

```
SELECT *
FROM crunchbase.companies
WHERE category_code = 'cleantech'
AND (name ILIKE '%solar%' OR name ILIKE '%power%' OR name
ILIKE '%energy%');
```

```
275
```

— Submission

Great work completing this Milestone! To submit your completed Milestone, you will need to download / export this document as a PDF and then upload it to the Milestone submission page. You can find the option to download as a PDF from the File menu in the upper-left corner of the Google Doc interface.