

Q1: Register Airbyte Account

The screenshot shows the Airbyte workspace members settings page. The left sidebar has a dark theme with sections for Connections, Sources, Destinations, Builder, and Settings (which is selected). The main area is titled 'Workspace members' and shows a table of members. One member, 'Sujay Chandra Shekara Sharma', is listed with the role 'Admin ORGANIZATION ADMIN'. A blue button at the top right says '+ New member'.

Q2: Register Snowflake Account

The screenshot shows the Snowflake account settings page. The left sidebar has a dark theme with sections for Databases, Worksheets, Search objects, My profile, Support, Appearance, Connect a tool to Snowflake, Client download, Documentation, Privacy notice, and Sign Out. The main area shows a query editor with the following SQL code:

```
1 SELECT CURRENT_ACCOUNT() AS account_name,
2        CURRENT_REGION() AS region,
3        CURRENT_USER() AS user_name,
4        CURRENT_VERSION() AS snowflake_version;
```

Below the query editor is a results table:

ACCOUNT_NAME	REGION	USER_NAME	SNOWFLAKE_VERSION
UB312900	GCP_US_CENTRAL1	SUJAYCS	9.7.2

A chart panel on the right shows the REGION column with one entry: GCP_US_CENTRAL1.

Q4: Snowflake Configuration

```
-- set variables (these need to be uppercase)
set p4_role = 'P4_ROLE';
set p4_username = 'SUJAYCS';
set p4_warehouse = 'P4_WAREHOUSE';
set survey_database = 'SURVEY_DATABASE';
set stock_db = 'STOCK_DB';
set survey_schema = 'SURVEY_SCHEMA';
set stock_schema = 'STOCK_SCHEMA';

-- Transaction 1: Role, warehouse, database setup
begin;

-- Q4.1 Switch to use account admin role
use role accountadmin;

-- Q4.2 Create warehouse
create warehouse if not exists identifier($p4_warehouse)
warehouse_size = xsmall
warehouse_type = standard
auto_suspend = 60
auto_resume = true
initially_suspended = true;

-- Q4.3 Create databases
create database if not exists identifier($survey_database);
create database if not exists identifier($stock_db);

-- Q4.4 Create role
create role if not exists identifier($p4_role);
grant role identifier($p4_role) to role SYSADMIN;

commit;

-- Transaction 2: Grant ownership of warehouse and database
begin;

-- Q4.5 Grant usage on warehouse to P4 role
grant USAGE
on warehouse identifier($p4_warehouse)
to role identifier($p4_role);
```

```
-- Q4.6 Grant role to Snowflake user  
grant role identifier($p4_role) to user identifier($p4_username);
```

```
-- Q4.7 Grant ownership of DBs to P4 role  
grant OWNERSHIP  
on database identifier($survey_database)  
to role identifier($p4_role);
```

```
grant OWNERSHIP  
on database identifier($stock_db)  
to role identifier($p4_role);
```

```
commit;
```

```
-- Transaction 3: Schema creation
```

```
begin;
```

```
-- Q4.8 Switch to P4 role  
use role identifier($p4_role);
```

```
-- Q4.9 Create schema for survey database  
USE DATABASE identifier($survey_database);  
CREATE SCHEMA IF NOT EXISTS identifier($survey_schema);
```

```
-- Q4.10 Create schema for stock database  
USE DATABASE identifier($stock_db);  
CREATE SCHEMA IF NOT EXISTS identifier($stock_schema);
```

```
commit;
```

```
-- Transaction 4: Grant ownership of schema
```

```
begin;
```

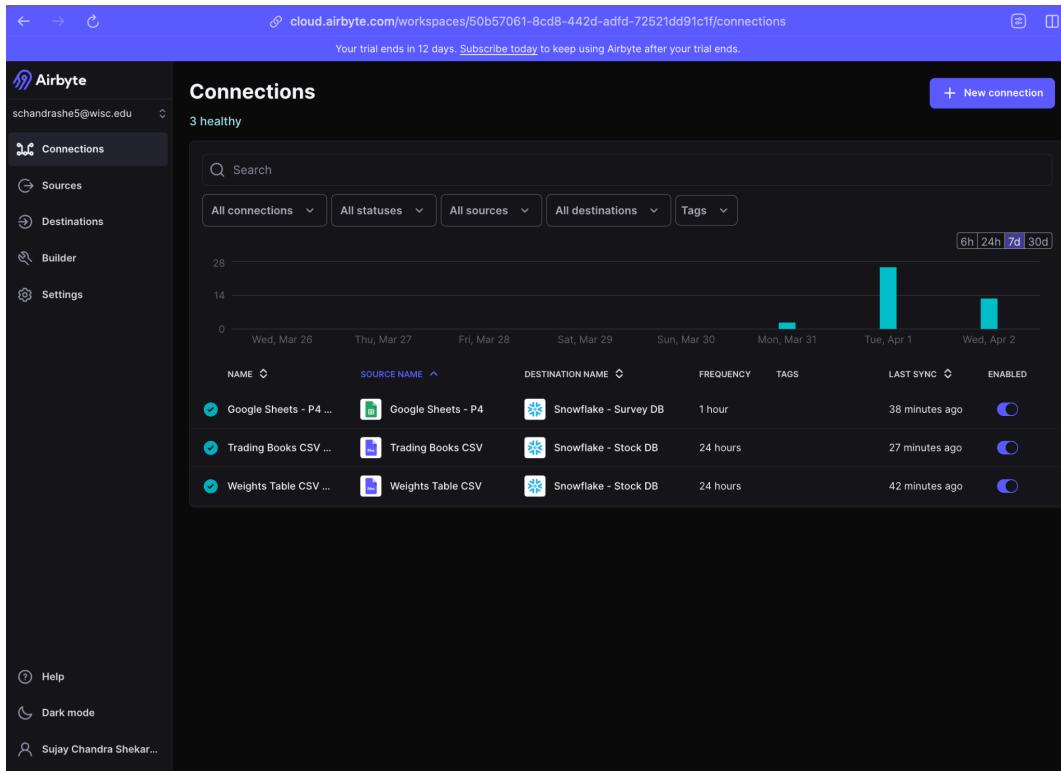
```
-- Q4.11 Grant ownership of survey schema to P4 role  
USE DATABASE identifier($survey_database);  
grant OWNERSHIP  
on schema identifier($survey_schema)  
to role identifier($p4_role);
```

```
-- Q4.12 Grant ownership of stock schema to P4 role  
USE DATABASE identifier($stock_db);
```

```
grant OWNERSHIP  
on schema identifier($stock_schema)  
to role identifier($p4_role);
```

```
commit;
```

Q5: Airbyte configuration for survey

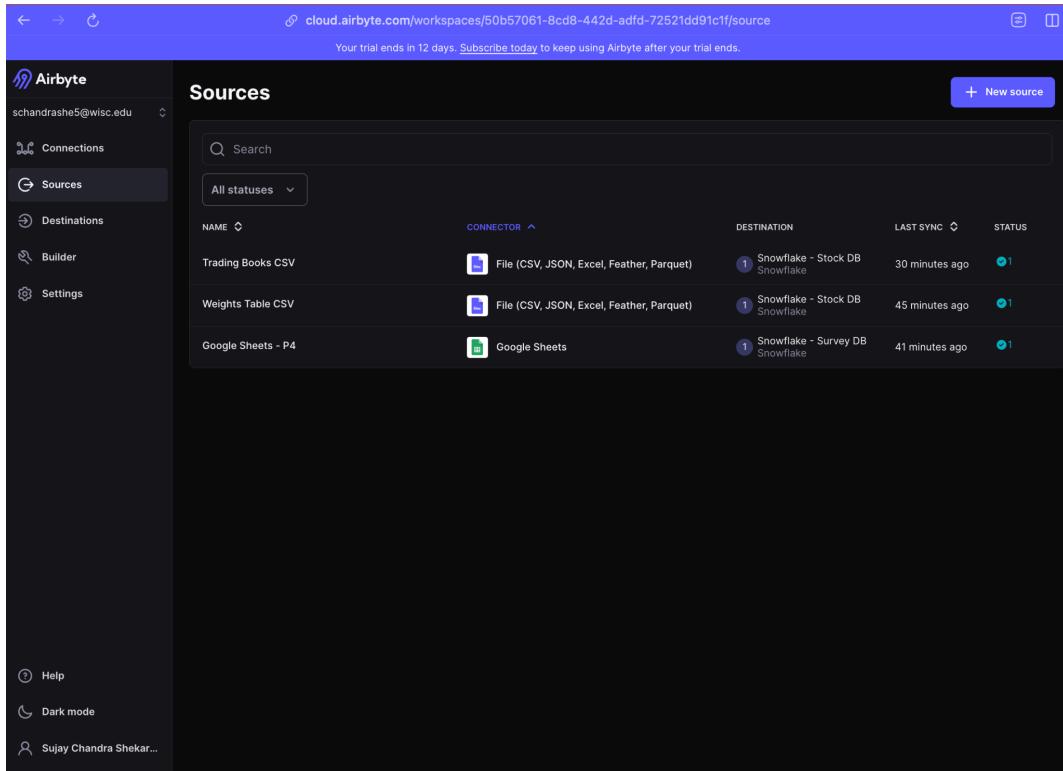


The screenshot shows the Airbyte web interface with the URL `cloud.airbyte.com/workspaces/50657061-8cd8-442d-adfd-72521dd91c1f/connections`. The page title is "Connections" and it displays 3 healthy connections. A search bar and filter buttons for "All connections", "All statuses", "All sources", "All destinations", and "Tags" are present. A time range selector shows "7d" selected. Below the chart, a table lists three connections:

NAME	SOURCE NAME	DESTINATION NAME	FREQUENCY	TAGS	LAST SYNC	ENABLED
Google Sheets - P4 ...	Google Sheets - P4	Snowflake - Survey DB	1 hour		38 minutes ago	<input checked="" type="checkbox"/>
Trading Books CSV ...	Trading Books CSV	Snowflake - Stock DB	24 hours		27 minutes ago	<input checked="" type="checkbox"/>
Weights Table CSV ...	Weights Table CSV	Snowflake - Stock DB	24 hours		42 minutes ago	<input checked="" type="checkbox"/>

The sidebar includes links for Help, Dark mode, and the user Sujay Chandra Shekar... .

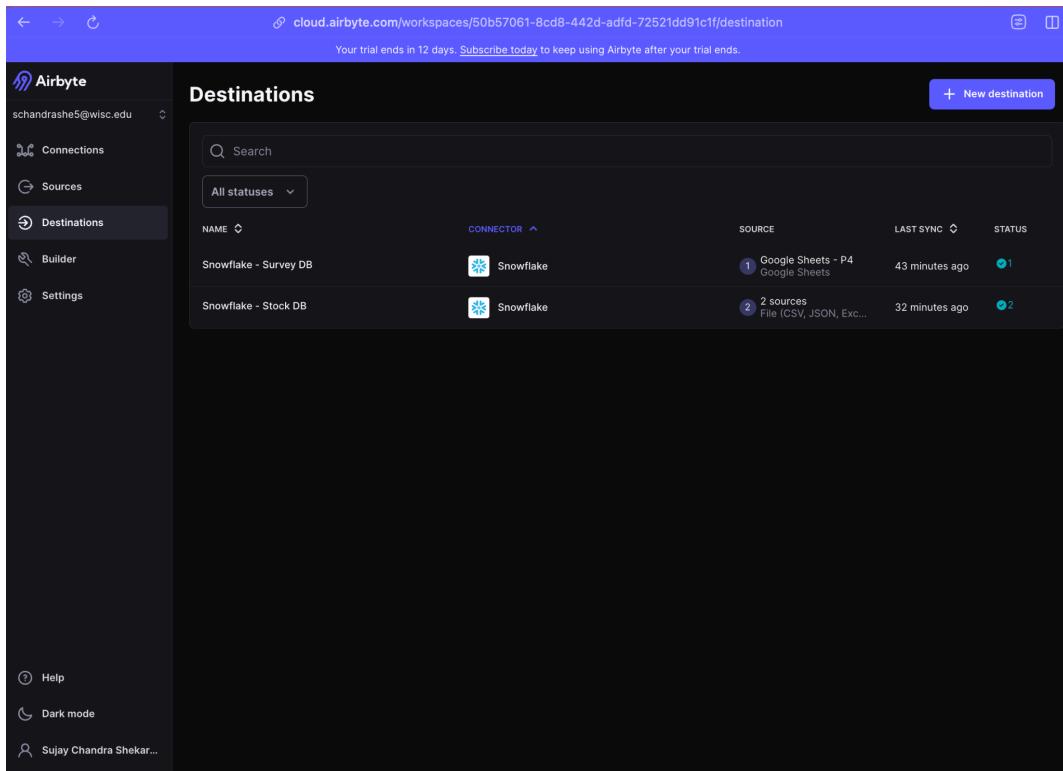
Q6: Airbyte configuration for CSV files



The screenshot shows the Airbyte web interface with the URL cloud.airbyte.com/workspaces/50b57061-8cd8-442d-adfd-72521dd91c1f/source. The top navigation bar includes a back arrow, forward arrow, refresh icon, and user information. A message at the top right says "Your trial ends in 12 days. [Subscribe today](#) to keep using Airbyte after your trial ends." The left sidebar has a dark theme with options: Connections, Sources (selected), Destinations, Builder, Settings, Help, Dark mode, and a user profile for Sujay Chandra Shekar. The main content area is titled "Sources" with a search bar and a dropdown for "All statuses". It lists three sources:

NAME	CONNECTOR	DESTINATION	LAST SYNC	STATUS
Trading Books CSV	File (CSV, JSON, Excel, Feather, Parquet)	1 Snowflake - Stock DB Snowflake	30 minutes ago	● 1
Weights Table CSV	File (CSV, JSON, Excel, Feather, Parquet)	1 Snowflake - Stock DB Snowflake	45 minutes ago	● 1
Google Sheets - P4	Google Sheets	1 Snowflake - Survey DB Snowflake	41 minutes ago	● 1

Q7: Connect Airbyte to Snowflake for CSV files



The screenshot shows the Airbyte web interface with the URL cloud.airbyte.com/workspaces/50b57061-8cd8-442d-adfd-72521dd91c1f/destination. The top navigation bar includes a back arrow, forward arrow, refresh icon, and user information. A message at the top right says "Your trial ends in 12 days. [Subscribe today](#) to keep using Airbyte after your trial ends." The left sidebar has a dark theme with options: Connections, Sources, Destinations (selected), Builder, Settings, Help, Dark mode, and a user profile for Sujay Chandra Shekar. The main content area is titled "Destinations" with a search bar and a dropdown for "All statuses". It lists two destinations:

NAME	CONNECTOR	SOURCE	LAST SYNC	STATUS
Snowflake - Survey DB	Snowflake	1 Google Sheets - P4 Google Sheets	43 minutes ago	● 1
Snowflake - Stock DB	Snowflake	2 sources File (CSV, JSON, Exc...)	32 minutes ago	● 2

Q8: Data Preview on Snowflake

The screenshot shows the Snowflake Data Preview interface for the SURVEY_DATABASE/SURVEY_SCHEMA/SURVEY table. The table has three columns: TIMESTAMP, EMAIL_ADDRESS, and WHAT_IS_YOUR_AGE_. The data preview shows 100 of 137 rows, updated just now. The first few rows are:

	TIMESTAMP	EMAIL_ADDRESS	WHAT_IS_YOUR_AGE_
1	3/19/2025 13:29:38	igallucci@wisc.edu	22
2	3/19/2025 13:29:54	jwcramer2@wisc.edu	21
3	3/19/2025 13:30:35	jzhang2752@wisc.edu	20
4	3/19/2025 13:29:05	entackett@wisc.edu	20
5	3/21/2025 11:17:35	snegus@wisc.edu	21
6	4/1/2025 18:18:53	weng32@wisc.edu	21
7	3/20/2025 16:01:25	amohan33@wisc.edu	21
8	4/1/2025 21:17:09	binafurulmuzr@wisc.edu	21
9	3/19/2025 13:30:37	mkuo22@wisc.edu	19
10	3/31/2025 13:37:35	ekanderson8@wisc.edu	21
11	4/1/2025 12:23:54	avkekane@wisc.edu	19
12	3/19/2025 13:30:36	tliang34@wisc.edu	23
13	3/31/2025 12:39:06	cwherbert@wisc.edu	22
14	3/19/2025 13:30:45	dsmith73@wisc.edu	21
15	4/2/2025 10:10:10	atapia3@wisc.edu	21
16	3/31/2025 16:02:43	sapantanakar2@wisc.edu	22
17	3/21/2025 13:52:13	avarma45@wisc.edu	21
18	3/19/2025 16:53:50	tpnagar@wisc.edu	22
19	4/1/2025 21:38:40	lallo@wisc.edu	21
20	3/21/2025 13:49:18	dgkulkarni2@wisc.edu	25

The screenshot shows the Snowflake Data Preview interface for the STOCK_DB/STOCK_SCHEMA/TRADING_BOOKS table. The table has three columns: DESK, NOTES, and PRICE. The data preview shows 30 rows, updated just now. The first few rows are:

	DESK	NOTES	PRICE
1	Equity Desk	Initiated position based on strong earnings report	175.5
2	Equity Desk	Taking profits after 1.5% gain	178.25
3	FX Desk	Positioning for ECB rate decision	1.085
4	FX Desk	Closing position after ECB announcement	1.092
5	Equity Desk	Adding to position on AI momentum	405.75
6	Equity Desk	Quick profit on AI news	408.5
7	FX Desk	Technical breakout signal	1.265
8	FX Desk	Target reached	1.272
9	Equity Desk	Strong search revenue growth	141.25
10	Equity Desk	Profit taking	142.5
11	Equity Desk	Re-entering on pullback	176.25
12	Equity Desk	Technical resistance hit	179.5
13	FX Desk	Strong economic data	1.088
14	FX Desk	Profit taking on data	1.095
15	Equity Desk	Cloud growth acceleration	407.25
16	Equity Desk	Target reached	410.75
17	FX Desk	BOE rate decision	1.268
18	FX Desk	Position closed after decision	1.275
19	Equity Desk	Ad revenue growth	142.25
20	Equity Desk	Technical target hit	144.5

The screenshot shows the Snowflake Data Preview interface. The left sidebar shows the navigation menu with 'Data' selected, and the 'Databases' section is active. The main area displays the 'WEIGHTS_TABLE' under the 'STOCK_DB / STOCK_SCHEMA'. The 'Data Preview' tab is selected, showing 2 rows updated just now. The table has columns: YTE_GENERATION_ID, DESK, REGION, and TARGET_ALLOCATION. The data is as follows:

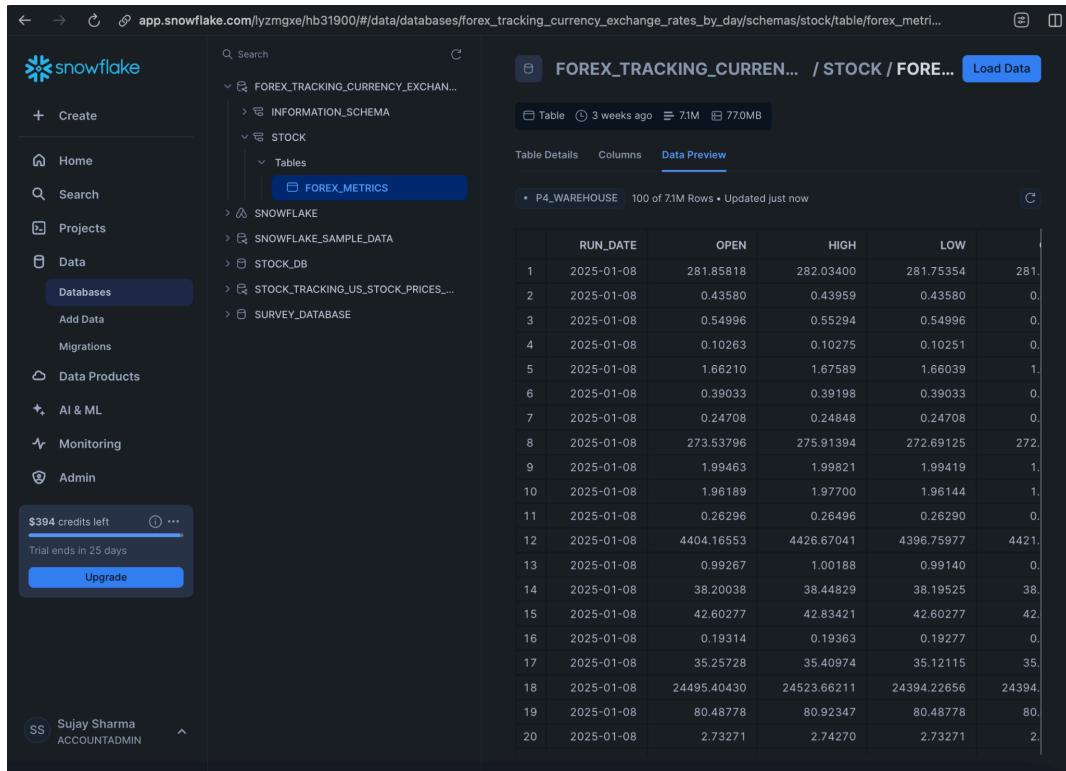
YTE_GENERATION_ID	DESK	REGION	TARGET_ALLOCATION	
1	2	FX Desk	Europe	0.25
2	2	Equity Desk	North America	0.75

Q9: Create a view using DBT for survey data

The screenshot shows the Snowflake Data Preview interface. The left sidebar shows the navigation menu with 'Data' selected, and the 'Databases' section is active. The main area displays the 'SURVEY_TRANSFORMED' view under the 'SURVEY_DATABASE / SURVEY_SCHEMA'. The 'Data Preview' tab is selected, showing 20 rows updated just now. The table has columns: IS_RUNNER, IS_PROCRASTINATOR, EMAIL, and HAS_P. The data is as follows:

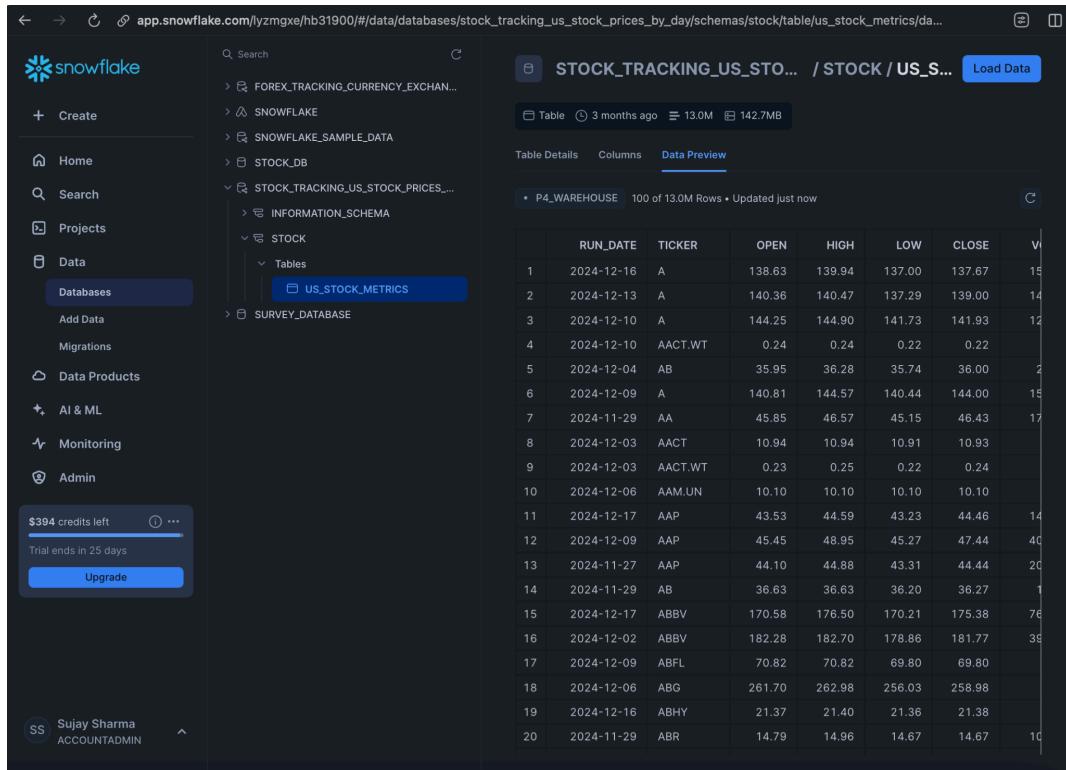
IS_RUNNER	IS_PROCRASTINATOR	EMAIL	HAS_P
1	No	igallucci@wisc.edu	Yes
2	No	jwcramer2@wisc.edu	Yes
3	Yes	jzhang2752@wisc.edu	Yes
4	Maybe	entackett@wisc.edu	No
5	Maybe	snegus@wisc.edu	Yes
6	Yes	weng32@wisc.edu	Yes
7	Yes	amohan33@wisc.edu	No
8	Yes	binfarulmuzr@wisc.edu	Yes
9	No	mkuo22@wisc.edu	Yes
10	Yes	ekanderson8@wisc.edu	Yes
11	No	avkekane@wisc.edu	Yes
12	Yes	tliang34@wisc.edu	No
13	Yes	cwherbert@wisc.edu	Yes
14	Yes	dsmith73@wisc.edu	Yes
15	Maybe	ataapia3@wisc.edu	Yes
16	Maybe	sapatankar2@wisc.edu	Yes
17	No	averma45@wisc.edu	Yes
18	No	tpnagar@wisc.edu	Yes
19	Maybe	lallo@wisc.edu	Yes
20	Maybe	dgulkarni2@wisc.edu	No

Q17: Ingest data directly from Snowflake Marketplace



The screenshot shows the Snowflake Marketplace interface. On the left, the navigation bar includes 'Create', 'Home', 'Search', 'Projects', 'Data' (selected), 'Databases' (selected), 'Add Data', 'Migrations', 'Data Products', 'AI & ML', 'Monitoring', and 'Admin'. A sidebar displays '\$394 credits left' and 'Trial ends in 25 days' with an 'Upgrade' button. The main content area shows the 'FOREX_TRACKING_CURRENCY_EXCHAN...' database structure under 'STOCK'. The 'FOREX_METRICS' table is selected, showing 100 rows of data. The data preview table has columns: RUN_DATE, OPEN, HIGH, LOW, and Close. The data is as follows:

	RUN_DATE	OPEN	HIGH	LOW	Close
1	2025-01-08	281.85818	282.03400	281.75354	281.75354
2	2025-01-08	0.43580	0.43959	0.43580	0.43959
3	2025-01-08	0.54996	0.55294	0.54996	0.55294
4	2025-01-08	0.10263	0.10275	0.10251	0.10275
5	2025-01-08	1.66210	1.67589	1.66039	1.67589
6	2025-01-08	0.39033	0.39198	0.39033	0.39198
7	2025-01-08	0.24708	0.24848	0.24708	0.24848
8	2025-01-08	273.53796	275.91394	272.69125	272.69125
9	2025-01-08	1.99463	1.99821	1.99419	1.99821
10	2025-01-08	1.96189	1.97700	1.96144	1.97700
11	2025-01-08	0.26296	0.26496	0.26290	0.26496
12	2025-01-08	4404.16553	4426.67041	4396.75977	4421.16553
13	2025-01-08	0.99267	1.00188	0.99140	1.00188
14	2025-01-08	38.20038	38.44829	38.19525	38.44829
15	2025-01-08	42.60277	42.83421	42.60277	42.83421
16	2025-01-08	0.19314	0.19363	0.19277	0.19363
17	2025-01-08	35.25728	35.40974	35.12115	35.40974
18	2025-01-08	24495.40430	24523.66211	24394.22656	24394.22656
19	2025-01-08	80.48778	80.92347	80.48778	80.92347
20	2025-01-08	2.73271	2.74270	2.73271	2.74270



The screenshot shows the Snowflake Marketplace interface. The structure is identical to the first screenshot, with the 'STOCK_TRACKING_US_STOCK_PRICES...' database selected under 'STOCK'. The 'US_STOCK_METRICS' table is selected, showing 100 rows of data. The data preview table has columns: RUN_DATE, TICKER, OPEN, HIGH, LOW, CLOSE, and VOLUME. The data is as follows:

	RUN_DATE	TICKER	OPEN	HIGH	LOW	CLOSE	VOLUME
1	2024-12-16	A	138.63	139.94	137.00	137.67	15
2	2024-12-13	A	140.36	140.47	137.29	139.00	14
3	2024-12-10	A	144.25	144.90	141.73	141.93	12
4	2024-12-10	AACT.WT	0.24	0.24	0.22	0.22	0.22
5	2024-12-04	AB	35.95	36.28	35.74	36.00	2
6	2024-12-09	A	140.81	144.57	140.44	144.00	15
7	2024-11-29	AA	45.85	46.57	45.15	46.43	17
8	2024-12-03	AACT	10.94	10.94	10.91	10.93	1
9	2024-12-03	AACT.WT	0.23	0.25	0.22	0.24	0.24
10	2024-12-06	AAM.UN	10.10	10.10	10.10	10.10	10
11	2024-12-17	AAP	43.53	44.59	43.23	44.46	14
12	2024-12-09	AAP	45.45	48.95	45.27	47.44	40
13	2024-11-27	AAP	44.10	44.88	43.31	44.44	20
14	2024-11-29	AB	36.63	36.63	36.20	36.27	1
15	2024-12-17	ABBV	170.58	176.50	170.21	175.38	76
16	2024-12-02	ABBV	182.28	182.70	178.86	181.77	39
17	2024-12-09	ABFL	70.82	70.82	69.80	69.80	1
18	2024-12-06	ABG	261.70	262.98	256.03	258.98	1
19	2024-12-16	ABHY	21.37	21.40	21.36	21.38	1
20	2024-11-29	ABR	14.79	14.96	14.67	14.67	10

Q23: Create a fact table for trading data

The screenshot shows the Snowflake Data Preview interface. The left sidebar navigation includes Home, Search, Projects, Data (selected), Databases (selected), Add Data, Migrations, Data Products, AI & ML, Monitoring, and Admin. A message at the bottom left indicates \$394 credits left and a trial ending in 25 days, with an Upgrade button. The main content area displays the SURVEY_DATABASE / SURVEY_SCHEMA / FACT_TAB_TRADING table. The table has columns TRADE_ID, BUY MONEY, SELL MONEY, and PROFIT. The preview shows 15 rows of data.

TRADE_ID	BUY MONEY	SELL MONEY	PROFIT
1	1001	17550	17825
2	1003	108500	109200
3	1005	20287.5	20425
4	1007	94875	95400
5	1009	10593.75	10687.5
6	1011	26437.5	26925
7	1013	136000	136875
8	1015	30543.75	30806.25
9	1017	126800	127500
10	1019	14225	14450
11	1021	35500	36050
12	1023	163500	164700
13	1025	40950	41325
14	1027	158750	159750
15	1029	17968.75	18281.25