

Cloud and advanced analytics

Week 2 - BigQuery

Public datasets

Initial page

Google Cloud

week2-caaCourse

Search (/) for resources, docs, products, and more

Search

BigQuery

Analysis

SQL workspace

Data transfers

Scheduled queries

Analytics Hub

Dataform

Partner Center

Migration

SQL translation

Administration

Monitoring

Capacity management

BI Engine

Policy tags

Release Notes

Explorer

+ ADD DATA


Type to search

Viewing all resources. [Show starred resources only.](#)

week2-caacourse

Welcome to your SQL Workspace!

Get started



Try the Google Trends Demo Query

This simple query generates the top search terms in the US from the Google Trends public dataset.

OPEN THIS QUERY

VIEW DATASET

+ COMPOSE A NEW QUERY

+ ADD DATA

Add your own data

Local file

Upload a local file

LAUNCH THIS GUIDE

Google Drive

Google storage service

LAUNCH THIS GUIDE

Google Cloud Storage

Google object storage service

LAUNCH THIS GUIDE

☒ Show welcome page on startup

PERSONAL HISTORY

PROJECT HISTORY

REFRESH

Mini tutorial

Google Cloud

week2-caaCourse

Search (/) for resources, docs, products, and more

Search

BigQuery

SQL workspace

Data transfers

Scheduled queries

Analytics Hub

Dataform

Partner Center

Migration

SQL translation

Administration

Monitoring

Capacity management

BI Engine

Policy tags

Release Notes

Explorer

Type to search

Viewing all resources. [Show starred resources only.](#)

ebi_surechembl

eclipse_megamovie

epa_historical_air_quality

ethereum_blockchain

etsi_technical_standards

faa

fcc_political_ads

fda_drug

fda_food

fdic_banks

fec

fhir_synthea

ga4_obfuscated_sample_eco...

gbif

gdelt_hathitrustbooks

gdelt_internetarchivebooks

genomics_cannabis

genomics_rice

geo_census_blockgroups

geo_census_tract...

geo_international...

geo_openstreetm...

google_trends

international_...

international_...

top_rising_ter...

top_terms

Google Trends Data

Your queried table has been starred for easy access. It contains the daily top rising Google Search terms in the United States, with their score, ranking, time and designated market area.

1/4

NEXT

Editor

*Unsaved query 2

RUN

SAVE

SHARE

SCHEDULE

MORE

This query will process 541.65 MB when run.

```
1 -- This query shows a list of the daily top Google Search terms.
2 SELECT
3   refresh_date AS Day,
4   term AS Top_Term,
5   -- These search terms are in the top 25 in the US each day.
6   rank,
7 FROM `bigquery-public-data.google_trends.top_terms`
8 WHERE
9   rank = 1
10  | -- Choose only the top term each day.
11  AND refresh_date >= DATE_SUB(CURRENT_DATE(), INTERVAL 2 WEEK)
12  | -- Filter to the last 2 weeks.
13 GROUP BY Day, Top_Term, rank
14 ORDER BY Day DESC
15 | -- Show the days in reverse chronological order.
16
```

PERSONAL HISTORY

PROJECT HISTORY

REFRESH

Query, results, and list of public datasets

Google Cloud

week2-caaCourse

Search (/) for resources, docs, products, and more

Search

2

BigQuery

Explorer

ADD DATA

SQL workspace

Data transfers

Scheduled queries

Analytics Hub

Dataform

Partner Center

Migration

SQL translation

Administration

Monitoring

Capacity management

BI Engine

Policy tags

Release Notes

Type to search

Showing all resources. [Show starred resources only](#)

ebi_surechembl

☆

⋮

eclipse_megamovie

☆

⋮

epa_historical_air_quality

☆

⋮

ethereum_blockchain

☆

⋮

etsi_technical_standards

☆

⋮

faa

☆

⋮

fcc_political_ads

☆

⋮

fda_drug

☆

⋮

fda_food

☆

⋮

fdic_banks

☆

⋮

fec

☆

⋮

fhir_synthea

☆

⋮

ga4_obfuscated_sample_eco...

☆

⋮

gbif

☆

⋮

gdelt_hathitrustbooks

☆

⋮

gdelt_internetarchivebooks

☆

⋮

genomics_cannabis

☆

⋮

genomics_rice

☆

⋮

geo_census_blockgroups

☆

⋮

geo_census_tracts

☆

⋮

geo_international_ports

☆

⋮

geo_openstreetmap

☆

⋮

google_trends

☆

⋮

international_top_rising_t...

★

⋮

international_top_terms

☆

⋮

top_rising_terms

☆

⋮

top_terms

★

⋮

SHOW MORE

RUN

SAVE

SHARE

SCHEDULE

MORE

-- This query shows a list of the daily top Google Search terms.

SELECT

refresh_date AS Day,

term AS Top_Term,

-- These search terms are in the top 25 in the US each day.

rank,

FROM `bigquery-public-data.google_trends.top_terms`

WHERE

rank = 1

-- Choose only the top term each day.

AND refresh_date >= DATE_SUB(CURRENT_DATE(), INTERVAL 2 WEEK)

-- Filter to the last 2 weeks.

GROUP BY Day, Top_Term, rank

ORDER BY Day DESC

-- Show the days in reverse chronological order.

Query results

SAVE RESULTS

EXPLORE DATA

JOB INFORMATION

RESULTS

JSON

EXECUTION DETAILS

EXECUTION GRAPH

PREVIEW

Row	Day	Top_Term	rank
1	2023-02-27	Lakers	1
2	2023-02-26	Jake Paul vs Tommy Fury	1
3	2023-02-25	Cocaine Bear	1
4	2023-02-24	Alex Murdaugh trial	1
5	2023-02-23	Murdaugh Murders	1
6	2023-02-22	Ash Wednesday	1
7	2023-02-21	Liverpool vs Real Madrid	1
8	2023-02-20	Richard Belzer	1
9	2023-02-19	Jimmy Carter	1
10	2023-02-18	NBA All-Star 2023	1
11	2023-02-17	Bruce Willis	1

Results per page: 50 1 - 13 of 13

PERSONAL HISTORYPROJECT HISTORY

REFRESH

Query, results, and list of public datasets

By clicking on any table, you can see the schema and the preview of it

Google Cloud

week2-caaCourse

Search (/) for resources, docs, products, and more

Search

2

?

BigQuery

Explorer

ADD DATA

Editor

*Unsaved query 2

bikeshare_trips

SHARE

COPY

SNAPSHOT

DELETE

EXPORT

REFRESH

Analysis

SQL workspace

Data transfers

Scheduled queries

Analytics Hub

Dataform

Partner Center

Migration

SQL translation

Administration

Monitoring

Capacity management

BI Engine

Policy tags

Release Notes

Type to search

Showing all resources. [Show starred resources only.](#)

week2-caacourse

bigquery-public-data

External connections

america_health_rankings

austin_311

austin_bikeshare

bikeshare_stations

bikeshare_trips

austin_crime

austin_incidents

austin_waste

baseball

bitcoin_blockchain

blackhole_database

bls

bls_qcew

breathe

broadstreet_adi

catalonian_mobile_coverage

catalonian_mobile_coverage...

census_bureau_acs

census_bureau_construction

census_bureau_international

census_bureau_usa

census_opportunity_atlas

census_utility

cfpb_complaints

chicago_crime

chicago_taxi_trips

bikeshare_trips

SCHEMA

DETAILS

PREVIEW

LINEAGE

PREVIEW

Row	trip_id	subscriber_type	bikeid	start_time	start_station_id	start_station_name	end_s
1	9900285908	Annual Membership (Austin B-c...	400	2014-10-26 14:12:00 UTC	2823	Capital Metro HQ - East 5th at B...	2544
2	9900289692	Walk Up	248	2015-10-02 21:12:01 UTC	1006	Zilker Park West	1008
3	9900285987	24-Hour Kiosk (Austin B-cycle)	446	2014-10-26 15:12:00 UTC	2712	Toomey Rd @ South Lamar	2712
4	9900285989	24-Hour Kiosk (Austin B-cycle)	203	2014-10-26 15:12:00 UTC	2712	Toomey Rd @ South Lamar	2712
5	9900285991	24-Hour Kiosk (Austin B-cycle)	101	2014-10-26 15:12:00 UTC	2712	Toomey Rd @ South Lamar	2712
6	9900286140	24-Hour Kiosk (Austin B-cycle)	242	2014-10-26 18:12:00 UTC	2541	State Capitol @ 14th & Colorado	2541
7	9900286143	24-Hour Kiosk (Austin B-cycle)	924	2014-10-26 18:12:00 UTC	2541	State Capitol @ 14th & Colorado	2541
8	9900286171	24-Hour Kiosk (Austin B-cycle)	869	2014-10-26 18:12:00 UTC	2536	Waller & 6th St.	2536
9	9900286214	Annual Membership (Austin B-c...	24	2014-10-26 20:12:00 UTC	2712	Toomey Rd @ South Lamar	2712
10	9900286540	24-Hour Kiosk (Austin B-cycle)	117	2014-10-27 15:12:00 UTC	2536	Waller & 6th St.	2536
11	13575843	Walk Up	302	2017-01-29 16:42:52 UTC	3464	Pease Park	3464
12	9900287085	Annual Membership (Austin B-c...	3	2014-10-28 17:12:00 UTC	2564	5th & San Marcos	2564
13	9900287160	Annual Membership (Austin B-c...	3	2014-10-28 19:12:00 UTC	2564	5th & San Marcos	2564
14	9900287264	Annual Membership (Austin B-c...	447	2014-10-29 08:12:00 UTC	2823	Capital Metro HQ - East 5th at B...	2544
15	9900287291	24-Hour Kiosk (Austin B-cycle)	894	2014-10-29 10:12:00 UTC	2541	State Capitol @ 14th & Colorado	2541
16	9900287293	24-Hour Kiosk (Austin B-cycle)	996	2014-10-29 10:12:00 UTC	2541	State Capitol @ 14th & Colorado	2541
17	9900287294	24-Hour Kiosk (Austin B-cycle)	894	2014-10-29 10:12:00 UTC	2541	State Capitol @ 14th & Colorado	2541
18	9900287378	Annual Membership (Austin B-c...	827	2014-10-29 13:12:00 UTC	2823	Capital Metro HQ - East 5th at B...	2544
19	9900287414	Founding Member (Austin B-cy...	864	2014-10-29 15:12:00 UTC	2712	Toomey Rd @ South Lamar	2712
20	9900287606	Annual Membership (Austin B-c...	513	2014-10-29 21:12:00 UTC	2536	Waller & 6th St.	2544
21	9900287861	24-Hour Kiosk (Austin B-cycle)	965	2014-10-30 14:12:00 UTC	2536	Waller & 6th St.	2536
22	9900287864	24-Hour Kiosk (Austin B-cycle)	983	2014-10-30 14:12:00 UTC	2536	Waller & 6th St.	2536
23	9900289130	Local365	132	2015-10-01 08:12:57 UTC	2536	Waller & 6th St.	1007
24	9900288008	24-Hour Kiosk (Austin B-cycle)	969	2014-10-30 19:12:00 UTC	2712	Toomey Rd @ South Lamar	2712
25	9900288149	Founding Member (Austin B-cy...	429	2014-10-31 11:12:00 UTC	2823	Capital Metro HQ - East 5th at B...	2823
26	9900288154	Annual Membership (Austin B-c...	610	2014-10-31 12:12:00 UTC	2823	Capital Metro HQ - East 5th at B...	2544
27	9900290433	Local365	453	2015-10-02 21:12:42 UTC	1006	Zilker Park West	1008
28	9900288210	Annual Membership (Austin B-c...	223	2014-10-31 13:12:00 UTC	2823	Capital Metro HQ - East 5th at B...	2823

Results per page: 50 1 - 50 of 1847746

PERSONAL HISTORY PROJECT HISTORY

REFRESH

Private datasets

“Add data”

Google Cloud

week2-caaCourse

Search (/) for resources, documents, and more

BigQuery

SQL workspace

Data transfers

Scheduled queries

Analytics Hub

Dataform

Partner Center

Migration

SQL translation

Administration

Monitoring

Capacity management

BI Engine

Policy tags

Release Notes

Explorer

Type to search

Viewing all resources. [Show starred resources only.](#)

week2-caacourse

External connections

bigquery-public-data

bikeshare_trips

SCHEMA

DETAILS

Row	trip_id	subscription
1	9900285908	Annual M
2	9900289692	Walk Up
3	9900285987	24-Hour
4	9900285989	24-Hour
5	9900285991	24-Hour
6	9900286140	24-Hour
7	9900286143	24-Hour
8	9900286171	24-Hour
9	9900286214	Annual M
10	9900286540	24-Hour
11	13575843	Walk Up
12	9900287085	Annual M
13	9900287160	Annual M
14	9900287264	Annual M
15	9900287291	24-Hour
16	9900287293	24-Hour
17	9900287294	24-Hour
18	9900287378	Annual M
19	9900287414	Founding
20	9900287606	Annual M
21	9900287861	24-Hour
22	9900287864	24-Hour
23	9900289130	Local365
24	9900288008	24-Hour
25	9900288149	Founding
26	9900288154	Annual M
27	9900290433	Local365
28	9900288210	Annual M

Add data

Source

Search for data sources

Popular sources

Local file

Upload a local file

Google Cloud Storage

Google object storage service

Connections to external data sources

Connection from BigQuery to an external data source

Additional sources

Viewing all 26 results.

Search for and star a project

Search for a BigQuery project and add it to the Explorer

Star a project by name

Add a BigQuery project to the Explorer by project name

Analytics Hub

Discover and subscribe to public, commercial or privately shared datasets

Google Drive

Google storage service

Amazon S3 - Data Transfer

Amazon object storage service, via the Data Transfer Service

Azure Blob Storage (Preview) - Data Transfer

Microsoft object storage service, via the Data Transfer Service

Public Datasets

BigQuery public datasets from the Google Cloud Public Dataset Program

Datastream

Real time CDC replication from relational databases such as MySQL, PostgreSQL, and Oracle

CLOSE

"teams" deleted.

PERSONAL HISTORY

Create a new dataset and table

Google Cloud

week2-caaCourse

BigQuery

Analysis

SQL workspace

Data transfers

Scheduled queries

Analytics Hub

Dataform

Partner Center

Migration

SQL translation

Administration

Monitoring

Capacity management

BI Engine

Policy tags

Release Notes

Explorer

Type to search

Viewing all resources. Show all

week2-caacourse

External connections

bigquery-public-data

Create table

Source

Create table from

Upload

Select file *

File format

Avro

Destination

Project *

week2-caacourse

Dataset *

Dataset is required

Table *

Unicode letters, marks, numbers, connectors, dashes or spaces allowed.

Table type

Native table

Schema

Source file defines the schema.

Partition and cluster settings

Partitioning

No partitioning

Clustering order

Clustering order determines the sort order of the data. Clustering can be used on both partitioned and non-partitioned tables.

Advanced options

CREATE TABLE

CANCEL

Create dataset

Project ID

week2-caacourse

CHANGE

Dataset ID *

world-cup

Letters, numbers, and underscores allowed

Location type

Region

Specifying a region provides dataset colocation with other GCP services

Multi-region

Letting BigQuery select a region within a group of regions provides higher quota limits

Multi-region *

US (multiple regions in United States)

Default table expiration

Enable table expiration

Default maximum table age

Days

Advanced options

CREATE DATASET

CANCEL

Schema auto-detect

Google Cloud

week2-caaCourse

BigQuery

Analysis

SQL workspace

Data transfers

Scheduled queries

Analytics Hub

Dataform

Partner Center

Migration

SQL translation

Administration

Monitoring

Capacity management

BI Engine

Policy tags

Release Notes

Explorer

Type to search

Viewing all resources. Show all

week2-caacourse

External connections

bigquery-public-data

Create table

Source

Create table from

Upload

Select file *

Teams.csv

File format

CSV

Destination

Project *

week2-caacourse

Dataset *

world_cup

Table *

teams

Unicode letters, marks, numbers, connectors, dashes or spaces allowed.

Table type

Native table

Schema

☒ Auto detect

Schema will be automatically generated.

Partition and cluster settings

Partitioning

No partitioning

Clustering order

Clustering order determines the sort order of the data. Clustering can be used on both partitioned and non-partitioned tables.

CREATE TABLE

CANCEL

Refresh content, et voilà

You can now visualize schema and preview, and query the table

Google Cloud

week2-caaCourse

Search (/) for resources, docs, products, and more

Search

2

?

:

BigQuery

Explorer

+ ADD DATA

<

home

×

Editor

×

*Unsaved query 2

×

bikeshare_trips

+

home

i

keyboard

fullscreen

Analysis

SQL workspace

Data transfers

Scheduled queries

Analytics Hub

Dataform

Partner Center

Migration

SQL translation

Administration

Monitoring

Capacity management

BI Engine

Policy tags

Release Notes

Type to search

Viewing all resources. [Show starred resources only.](#)

week2-caacourse

External connections

bigquery-public-data

Create dataset

Refresh contents

bikeshare_trips

QUERY

SHARE

COPY

SNAPSHOT

DELETE

EXPORT

REFRESH

SCHEMA

DETAILS

PREVIEW

LINEAGE

PREVIEW

Row	trip_id	subscriber_type	bikeid	start_time	start_station_id	start_station_name	end_s
	285908	Annual Membership (Austin B-c...	400	2014-10-26 14:12:00 UTC	2823	Capital Metro HQ - East 5th at B...	2544
	289692	Walk Up	248	2015-10-02 21:12:01 UTC	1006	Zilker Park West	1008
	285987	24-Hour Kiosk (Austin B-cycle)	446	2014-10-26 15:12:00 UTC	2712	Toomey Rd @ South Lamar	2712
4	9900285989	24-Hour Kiosk (Austin B-cycle)	203	2014-10-26 15:12:00 UTC	2712	Toomey Rd @ South Lamar	2712
5	9900285991	24-Hour Kiosk (Austin B-cycle)	101	2014-10-26 15:12:00 UTC	2712	Toomey Rd @ South Lamar	2712
6	9900286140	24-Hour Kiosk (Austin B-cycle)	242	2014-10-26 18:12:00 UTC	2541	State Capitol @ 14th & Colorado	2541
7	9900286143	24-Hour Kiosk (Austin B-cycle)	924	2014-10-26 18:12:00 UTC	2541	State Capitol @ 14th & Colorado	2541
8	9900286171	24-Hour Kiosk (Austin B-cycle)	869	2014-10-26 18:12:00 UTC	2536	Waller & 6th St.	2536
9	9900286214	Annual Membership (Austin B-c...	24	2014-10-26 20:12:00 UTC	2712	Toomey Rd @ South Lamar	2712
10	9900286540	24-Hour Kiosk (Austin B-cycle)	117	2014-10-27 15:12:00 UTC	2536	Waller & 6th St.	2536
11	13575843	Walk Up	302	2017-01-29 16:42:52 UTC	3464	Pease Park	3464
12	9900287085	Annual Membership (Austin B-c...	3	2014-10-28 17:12:00 UTC	2564	5th & San Marcos	2564
13	9900287160	Annual Membership (Austin B-c...	3	2014-10-28 19:12:00 UTC	2564	5th & San Marcos	2564
14	9900287264	Annual Membership (Austin B-c...	447	2014-10-29 08:12:00 UTC	2823	Capital Metro HQ - East 5th at B...	2544
15	9900287291	24-Hour Kiosk (Austin B-cycle)	894	2014-10-29 10:12:00 UTC	2541	State Capitol @ 14th & Colorado	2541
16	9900287293	24-Hour Kiosk (Austin B-cycle)	996	2014-10-29 10:12:00 UTC	2541	State Capitol @ 14th & Colorado	2541
17	9900287294	24-Hour Kiosk (Austin B-cycle)	894	2014-10-29 10:12:00 UTC	2541	State Capitol @ 14th & Colorado	2541
18	9900287378	Annual Membership (Austin B-c...	827	2014-10-29 13:12:00 UTC	2823	Capital Metro HQ - East 5th at B...	2544
19	9900287414	Founding Member (Austin B-cy...	864	2014-10-29 15:12:00 UTC	2712	Toomey Rd @ South Lamar	2712
20	9900287606	Annual Membership (Austin B-c...	513	2014-10-29 21:12:00 UTC	2536	Waller & 6th St.	2544
21	9900287861	24-Hour Kiosk (Austin B-cycle)	965	2014-10-30 14:12:00 UTC	2536	Waller & 6th St.	2536
22	9900287864	24-Hour Kiosk (Austin B-cycle)	983	2014-10-30 14:12:00 UTC	2536	Waller & 6th St.	2536
23	9900289130	Local365	132	2015-10-01 08:12:57 UTC	2536	Waller & 6th St.	1007
24	9900288008	24-Hour Kiosk (Austin B-cycle)	969	2014-10-30 19:12:00 UTC	2712	Toomey Rd @ South Lamar	2712
25	9900288149	Founding Member (Austin B-cy...	429	2014-10-31 11:12:00 UTC	2823	Capital Metro HQ - East 5th at B...	2823
26	9900288154	Annual Membership (Austin B-c...	610	2014-10-31 12:12:00 UTC	2823	Capital Metro HQ - East 5th at B...	2544
27	9900290433	Local365	453	2015-10-02 21:12:42 UTC	1006	Zilker Park West	1008
28	9900288210	Annual Membership (Austin B-c...	223	2014-10-31 13:12:00 UTC	2823	Capital Metro HQ - East 5th at B...	2823

"teams" created. GO TO TABLE

Results per page: 50 1 - 50 of 1847746

REFRESH

Add another table

To add another table, click on the three dots on the right of the dataset

Google Cloud

week2-caaCourse

BigQuery

Analysis

SQL workspace

Data transfers

Scheduled queries

Analytics Hub

Dataform

Partner Center

Migration

SQL translation

Administration

Monitoring

Capacity management

BI Engine

Policy tags

Release Notes

Explorer

Type to search

Viewing all resources. Show all

week2-caacourse

External connections

world_cup

teams

bigquery-public-data

Create table

Source

Create table from

Upload

Select file *

Players.csv

File format

CSV

Destination

Project *

week2-caacourse

Dataset *

world_cup

Table *

players

Unicode letters, marks, numbers, connectors, dashes or spaces allowed.

Table type

Native table

Schema

Auto detect

Schema will be automatically generated.

Partition and cluster settings

Partitioning

No partitioning

Clustering order

Clustering order determines the sort order of the data. Clustering can be used on both partitioned and non-partitioned tables.

CREATE TABLE

CANCEL

The end

- Now you can query both public and private datasets
- Queries can be done on the GCP console, or on python.
- Check out the notebook in the repo to learn how to query from python, both public and private datasets.