

Bicycle Hire And Rental Service

Bicycle is used by a lot of citizens in the United Kingdom as a means of transportation and it is one of the most common means of transportation in the country due to its low cost and it's accessibility to hire one.

On this note, I'm going to extract data from bicycle hires and rental services collected by the London bicycle hire and rental service company in the public database using BigQuery. The dataset contains information on the usage of bicycle rental service by the citizens. I'm going to be answering questions like:

- End station names
- How many bike trips end at 'Moor Street, Soho'
- Name of station whose id is 111
- Number of trip duration > 2,400sec
- Station name with id 1710

1). End station names

The first line of code connects us to the public-
`data.london_bicycles.cycle_hire` database where the table
`london_bicycles.cycle_hire` is residing. I'll be using the `SELECT` to pick the
table I want the query to return. The `FROM` to pick the database I want to extract the
data from. Using the `LIMIT` functions to restrict the numbers of rows it can extract from
the database.

QUERY-

```
SELECT
end_station_name
FROM
bigquery-public-data.london_bicycles.cycle_hire
LIMIT
10
```

RESULT

Row	end_station_name
1	Golden Square, Soho
2	Embankment (Savoy), Strand
3	Green Park Station, Mayfair
4	Park Lane , Hyde Park

Row	end_station_name
5	Wellington Arch, Hyde Park
6	St. Mark's Road, North Kensington
7	Storey's Gate, Westminster
	Black Lion Gate, Kensington
8	Gardens
9	Little Brook Green, Brook Green
10	The Vale, Chelsea

2). How many bike trips end at 'Moor Street, Soho'

The first line of code connects us to the public-
[data.london_bicycles.cycle_hire](#) database where the table
[london_bicycles.cycle_hire](#) is residing. I'll be using the **SELECT** to pick the
table I want the query to return and using the **FROM** to pick the database I want to
extract the data from. And **WHERE** to choose the condition of the data extraction.

QUERY-

```
SELECT
  COUNT (DISTINCT bike_id) AS num_of_bikes
FROM
  `bigquery-public-data.london_bicycles.cycle_hire`
WHERE
  end_station_name = 'Moor Street, Soho'
```

RESULT

Row	num_of_bikes
1	24998

3). Name of station whose id is 111

The first line of code connects us to the public-
[data.london_bicycles.cycle_hire](#) database where the table
[london_bicycles.cycle_hire](#) is residing. I'll be using the **SELECT** to pick the
table I want the query to return and using the **FROM** to pick the database I want to
extract the data from. And **WHERE** to choose the condition of the data extraction.

QUERY-

```

SELECT
  DISTINCT start_station_name
FROM
  `bigquery-public-data.london_bicycles.cycle_hire`
WHERE
  start_station_id = 111

```

RESULT

Row	start_station_name
1	Park Lane , Hyde Park

4). Number of trip duration > 2,400sec

The first line of code connects us to the public-
[data.london_bicycles.cycle_hire](#) database where the table
[london_bicycles.cycle_hire](#) is residing. I'll be using the [SELECT](#) to pick the
table I want the query to return and the [AS](#) alias to rename the columns been
extracted from the table. The [FROM](#) to pick the database I want to extract the data
from. And [WHERE](#) to choose the condition of the data extraction.

QUERY-

```

SELECT
  COUNT (DISTINCT bike_id) AS num_of_duration
FROM
  `bigquery-public-data.london_bicycles.cycle_hire`
WHERE
  duration > 2400;

```

RESULT

Row	num_of_duration
1	31636

5). Station name with id 1710

The first line of code connects us to the public-
`data.london_bicycles.cycle_hire` database where the table
`london_bicycles.cycle_hire` is residing. I'll be using the `SELECT` to pick the
table I want the query to return. The `FROM` to pick the database I want to extract the
data from. And `WHERE` to choose the condition of the data extraction. Using the
`LIMIT` functions to restrict the numbers of rows it can extract from the database.

QUERY-

```
SELECT
  DISTINCT start_station_name
FROM
  `bigquery-public-data.london_bicycles.cycle_hire`
WHERE bike_id = 1710
```

RESULT

Row	start_station_name	Load more
2	Sutton Street, Shadwell	
3	Good's Way, King's Cross	
4	Abbotsbury Road, Holland Park	
5	Northumberland Avenue, Strand	
6	Rainville Road, Hammersmith	
7	Lincoln's Inn Fields, Holborn	
8	Old Quebec Street, Marylebone	
9	Erin Close, Walham Green	
10	Felsham Road, Putney	