

## 1) Create database

Filter objects

**bike\_db**

- Tables
  - bike\_share\_yr\_0
    - Columns
    - Indexes
    - Foreign Keys
    - Triggers
- Views
- Stored Procedures
- Functions
- parks\_and\_recreation
- sakila
- sys
- world

```
1 • SELECT * FROM bike_db.bike_share_yr_0;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content

	dteday	season	yr	mnth	hr	holiday	weekday	workingday
▶	1/1/2021	1	0	1	0	0	6	0
	1/1/2021	1	0	1	1	0	6	0
	1/1/2021	1	0	1	2	0	6	0
	1/1/2021	1	0	1	3	0	6	0

## 2) Files **bike\_share\_yr\_0** and file **bike\_share\_yr\_1** needs to be joined

```
7 • SELECT * FROM bike_db.bike_share_yr_0
8 union
9 SELECT * FROM bike_db.bike_share_yr_1
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [IA](#)

	dteday	season	yr	mnth	hr	holiday	weekday	workingday	weathersit	temp	atemp	hum
▶	1/1/2021	1	0	1	0	0	6	0	1	0.24	0.2879	0.81
	1/1/2021	1	0	1	1	0	6	0	1	0.22	0.2727	0.8
	1/1/2021	1	0	1	2	0	6	0	1	0.22	0.2727	0.8
	1/1/2021	1	0	1	3	0	6	0	1	0.24	0.2879	0.75
	1/1/2021	1	0	1	4	0	6	0	1	0.24	0.2879	0.75
	1/1/2021	1	0	1	5	0	6	0	2	0.24	0.2576	0.75
	1/1/2021	1	0	1	6	0	6	0	1	0.22	0.2727	0.8

Result 2 ×

Output

Action Output

#	Time	Action	Message
✓ 24	17:50:36	DEALLOCATE PREPARE stmt	OK
✓ 25	17:53:09	SELECT * FROM bike_db.bike_share_yr_0 union SELECT * FROM bike_db.bike_...	34758 row(s) returned

- 3) The cost\_table contains yr, cost, and cost of goods data. The yr column serves as the common key, allowing us to perform a left join between the tables.

```
1 • with cte as
2 (
3   SELECT * FROM bike_share_yr_0
4   union
5   SELECT * FROM bike_share_yr_1
6 )
7
8 SELECT * from cte
9 left join cost_table
10 on cte.yr = cost_table.yr
```

Result Grid   Filter Rows:   Export:   Wrap Cell Content:   Fetch rows:													
yr	holiday	weekday	workingday	weathersit	temp	atemp	hum	windspeed	rider_type	riders	yr	price	COGS
0	6	0	1	1	0.24	0.2879	0.75	0	casual	3	0	3.99	1.24
0	6	0	1	1	0.24	0.2879	0.75	0	casual	0	0	3.99	1.24
0	6	0	2	2	0.24	0.2576	0.75	0	casual	0	0	3.99	1.24
0	6	0	1	1	0.22	0.2727	0.8	0	casual	2	0	3.99	1.24

- 4) Columns we want are *dteday*, *season*, *cte.yr*, *weekday*, *hr*, *rider\_type*, *riders*, *price*, *COGS*

```
8 SELECT dteday, season, cte.yr, weekday, hr, rider_type, riders, price, COGS from cte
9 left join cost_table
10 on cte.yr = cost_table.yr
```

Result Grid   Filter Rows:   Export:   Wrap Cell Content:   Fetch rows:									
	dteday	season	yr	weekday	hr	rider_type	riders	price	COGS
▶	1/1/2021	1	0	6	0	casual	3	3.99	1.24
	1/1/2021	1	0	6	1	casual	8	3.99	1.24
	1/1/2021	1	0	6	2	casual	5	3.99	1.24
	1/1/2021	1	0	6	3	casual	3	3.99	1.24
	1/1/2021	1	0	6	4	casual	0	3.99	1.24

5) According to the requirements, we need the Revenue and Profit

```
8  SELECT dteday, season, cte.yr, weekday, hr, rider_type, riders, price, COGS,  
9  riders*price as revenue,  
10 riders*price - COGS as profit  
11 from cte  
12 left join cost_table  
13 on cte.yr = cost_table.yr;
```

Result Grid											
Filter Rows:											
Export: Wrap Cell Content: Fetch rows:											
	dteday	season	yr	weekday	hr	rider_type	riders	price	COGS	revenue	profit
▶	2021-01-01 00:00:00	1	0	6	0	casual	3	3.99	1.24	11.97	10.73
	2021-01-01 00:00:00	1	0	6	1	casual	8	3.99	1.24	31.92	30.680000000000
	2021-01-01 00:00:00	1	0	6	2	casual	5	3.99	1.24	19.950000000000003	18.710000000000
	2021-01-01 00:00:00	1	0	6	3	casual	3	3.99	1.24	11.97	10.73
	2021-01-01 00:00:00	1	0	6	4	casual	0	3.99	1.24	0	-1.24
	2021-01-01 00:00:00	1	0	6	5	casual	0	3.99	1.24	0	-1.24

6) Now we have all the details ready, Power BI dashboard can be created.