

## Data Ingestion from various data sources and Basic SQL Analysis: (SQL Tasks)

### 1. Count of unique device ids in the train table

*select count(distinct device\_id) as Unique\_id\_count from train;*

```
mysql> select count(distinct device_id) as Unique_id_count from train;
+-----+
| Unique_id_count |
+-----+
|          74645 |
+-----+
1 row in set (0.77 sec)
```

### 2. Check whether there are any duplicate device ids present in the brand\_device table. If yes, how many duplicates?

*select device\_id, count(\*) from brand\_device group by device\_id having count(\*) > 1;*

*yes , 532 duplicates*

```
mysql> select device_id, count(*) from brand_device group by device_id having count(*) > 1;
+-----+-----+
| device_id          | count(*) |
+-----+-----+
| -1054056445342370000 |         2 |
| -1058976689976600000 |         2 |
| -1060418556246360000 |         2 |
| -1076064832252210000 |         2 |
| -1087216240998270000 |         2 |
```

### 3. Number of unique phone brands from the brand\_device table

*select count(distinct phone\_brand) as unique\_phone\_brand from brand\_device;*

```
mysql> select count(distinct phone_brand) as unique_phone_brand from brand_device;
+-----+
| unique_phone_brand |
+-----+
|          97 |
+-----+
1 row in set (0.15 sec)
```

### 4. Count of device ids where the latitude and longitude detail are zero, from the events table

*select count(device\_id) as device\_count from events where longitude = 0 and latitude = 0;*

```
mysql> select count(device_id) as device_count from events where longitude = 0 and latitude = 0;  
+-----+  
| device_count |  
+-----+  
|          968675 |  
+-----+  
1 row in set (7.09 sec)
```