WEATHER OBSERVATION STATION 4

TASK:

Find the difference between the total number of **CITY** entries in the table and the number of distinct **CITY** entries in the table.
The **STATION** table is described as follows:

STATION

Field	Type
ID	NUMBER
CITY	VARCHAR2(21)
STATE	VARCHAR2(2)
LAT_N	NUMBER
LONG_W	NUMBER

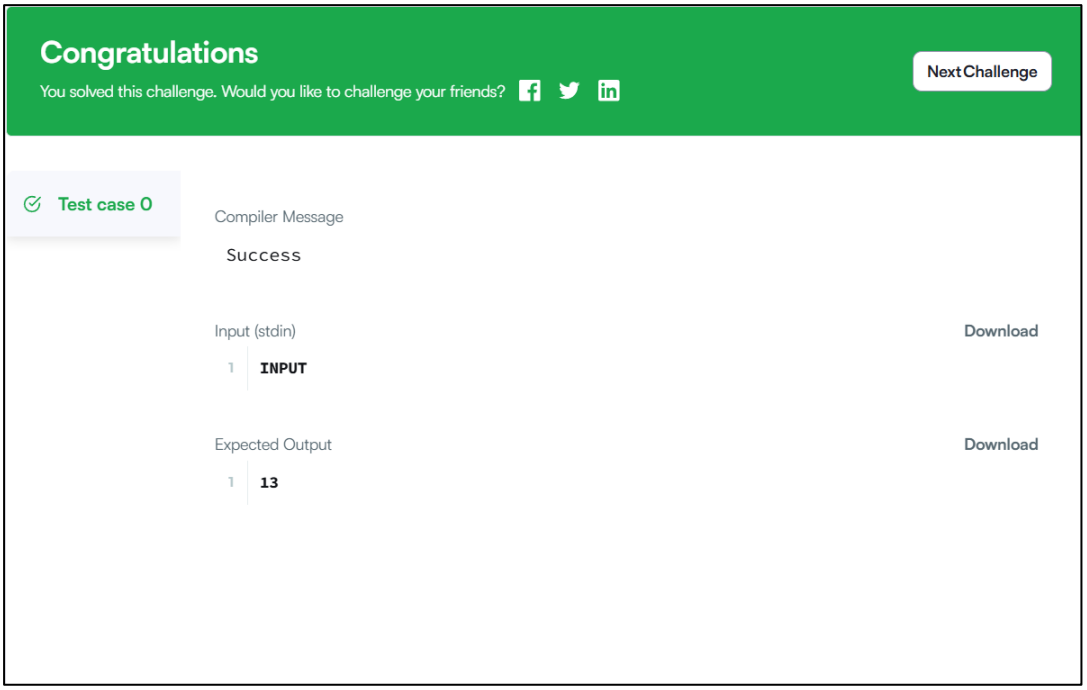
where **LAT_N** is the northern latitude and **LONG_W** is the western longitude.

For example, if there are three records in the table with **CITY** values 'New York', 'New York', 'Bengalaru', there are 2 different city names: 'New York' and 'Bengalaru'. The query returns 1, because **total number of records – number of unique city names = 3 – 2 = 1**.

SOLUTION:

```
SELECT COUNT(CITY) - COUNT(DISTINCT CITY) FROM STATION;
```

SUBMISSION:



CONCEPT USED:

COUNT(*) counts the number of rows

In MySQL, `DISTINCT` is used to eliminate duplicate rows from the result set. It helps in retrieving unique combinations of column values from the selected data. Note that `DISTINCT` applies to the entire row for the selected columns, not individual columns.

SOURCES:

1. https://www.datacamp.com/doc/mysql/mysql-distinct-on
2. https://dev.mysql.com/doc/refman/9.3/en/counting-rows.html
3. https://dev.mysql.com/doc/refman/9.3/en/arithmetic-functions.html#operator_minus