Like Operator with escape keyword

1. Query the first name and last name of employees whose first name is not 5 characters long

   NOT LIKE will fetch all the data that will not match the pattern

```
SELECT
    first_name,last_name
FROM
    employee
WHERE
    First_name NOT LIKE '_____';
```

Output:

first_name	last_name
tom	taylor
mike	whalen
andy	lumb
ram	kumar
john	king

2. Query the first name and last name of employees whose first name does not begin with 'A'

```
SELECT
     first_name,last_name
FROM
    employee
WHERE
    first_name NOT LIKE 'a%';
```

Output:

first_name	last_name
kelly	davis
tom	taylor
mike	whalen
ram	kumar
rohan	sharma
john	king

3. Query the first name and last name of employees whose first name ends with 'n' but does not begin with 'A'

```
SELECT
    first_name,last_name
FROM
    employee
WHERE
    first_name
        LIKE '%n' AND first_name NOT LIKE 'a%';
```

Output:

first_name	last_name
rohan	sharma
john	king

ESCAPE KEYWORD WITH LIKE OPERATOR:

The ESCAPE keyword is used to **escape pattern matching characters** such as the (%) percentage and underscore (_) if they form part of the data.

Before we understand escape keyword with an example let us include one record with the special character using UPDATE query

4. Query the first name and email id of employees with email id's containing _ in it

```
SELECT
      first_name, email
FROM
    employee
WHERE
    email LIKE '%#_%' ESCAPE '#';
```

In this query, the ESCAPE clause specified that the character# is the escape character. It instructs the LIKE operator to treat the _ character as a literal string instead of a wildcard. Note that without the ESCAPE clause, the query would return an empty result set.

Output:

first_name	email
john	jo__%%$@gmail.com

5. Display the first name and email id of employees with email ids containing % in it

```sql
SELECT
    first_name, email
FROM
    employee
WHERE
    email
LIKE '%1%%' ESCAPE '1';
```

In this query, the ESCAPE clause specified that the character **1** is the escape character. It instructs the LIKE operator to treat the **%** character as a literal string instead of a wildcard. Note that without the ESCAPE clause, the query would return an empty result set.

Output:

first_name	email
john	jo__%%$@gmail.com

6. Display the first name, email id of employees with email ids containing two consecutive __ in it

```sql
SELECT
    first_name, email
FROM
    employee
WHERE
    email
LIKE '%#_#_%' ESCAPE '#';
```

Output:

first_name	email

john	jo__%%$@gmail.com

7. Display the first name, email id of employees with email ids containing two __ in it

```
SELECT
  first_name, email
FROM
  employee
WHERE
  email
LIKE '%#_%#_%' ESCAPE '#';
```

Output:

first_name	email
john	jo__%%$@gmail.com

Hackerrank Queries

1. **Weather Observation station 3**
   https://www.hackerrank.com/challenges/weather-observation-station-3/problem?isFullScreen=true

Query a list of CITY names from STATION for cities that have an even ID

number. Print the results in any order, but exclude duplicates from the answer.

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.

Solution

```
SELECT DISTINCT
    CITY
FROM
    STATION
WHERE ID%2 =0;
```

Here DISTINCT Keyword is used as they are asking for unique values in the
result.We are trying to fetch the values where the ID is an even number so we
are checking when the number divided by 2 remainder will be zero or not.

2. Weather Observation Station 6

Query the list of CITY names starting with vowels (i.e., a, e, i, o, or u) from STATION. Your result cannot contain duplicates.

Input Format

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.

Solution:

```
SELECT DISTINCT
    CITY
FROM
    STATION
WHERE
(CITY LIKE 'A%' OR CITY LIKE 'E%' OR CITY LIKE 'I%' OR CITY LIKE
'O%' OR CITY LIKE 'U%');
```

3. Weather Observation Station 9
https://www.hackerrank.com/challenges/weather-observation-station-9/problem?isFullScreen=true

Query the list of CITY names from STATION that do not start with vowels.

Your result cannot contain duplicates.

Input Format

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

Solution:

```sql
SELECT DISTINCT
      CITY
FROM
      STATION
WHERE NOT
(CITY LIKE 'A%' OR CITY LIKE 'E%' OR CITY LIKE 'I%' OR CITY LIKE
'O%' OR CITY LIKE 'U%');
```

4. **Weather Observation Station 7**

Query the list of CITY names ending with vowels (a, e, i, o, u) from STATION.

Your result cannot contain duplicates.

Input Format

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.

Solution:

```sql
SELECT DISTINCT
    CITY
FROM
    STATION
WHERE
(CITY LIKE '%A' OR CITY LIKE '%E' OR CITY LIKE '%I' OR CITY LIKE
'%O' OR CITY LIKE '%U');
```

5. **Weather Observation Station 10**

Query the list of CITY names from STATION that do not end with vowels.

Your result cannot contain duplicates.

Input Format

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.

Solution:

```sql
SELECT DISTINCT
    CITY
FROM
    STATION
WHERE NOT
(CITY LIKE '%A' OR CITY LIKE '%E' OR CITY LIKE '%I' OR CITY LIKE
'%O' OR CITY LIKE '%U');
```