Exp No. 4 Date : 28-07-2019

BASIC SQL QUERIES - II

AIM:

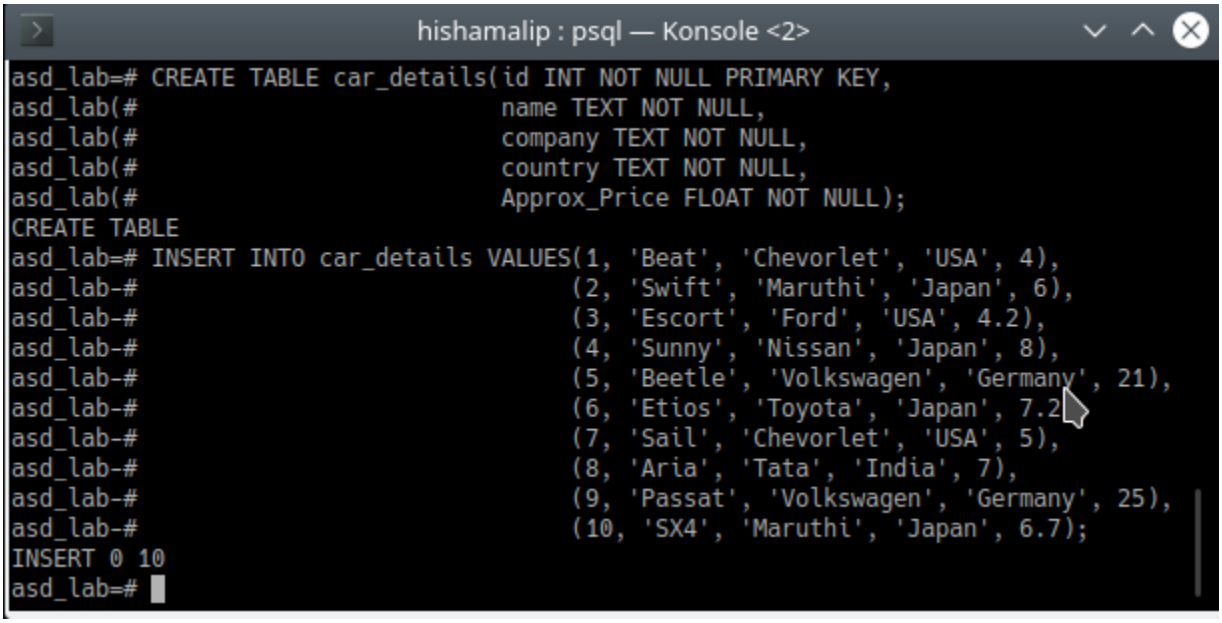
Introduction to SQL statements

1. ALTER
2. RENAME
3. SELECT DISTINCT
4. SQL IN
5. SQL BETWEEN
6. SQL ALIASES
7. SQL AND
8. SQL OR

QUESTION:

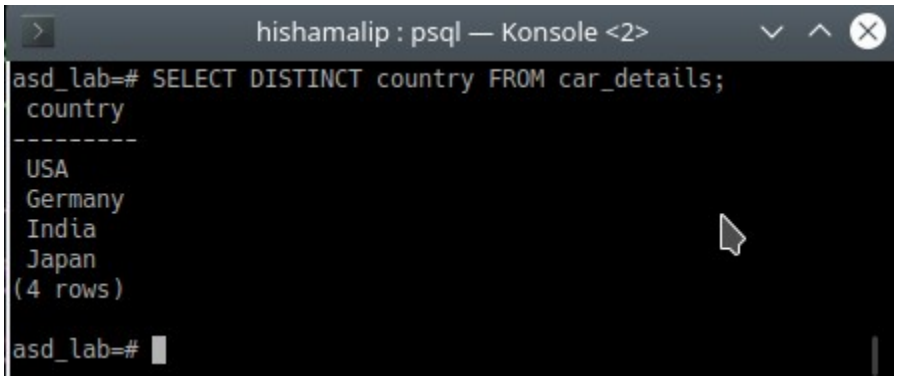
Create a table named car_details and populate the table as shown below.

ID	Name	company	country	ApproxPrice(in lakhs)
1	Beat	Chevrolet	USA	4
2	Swift	Maruti	Japan	6
3	Escort	Ford	USA	4.2
4	Sunny	Nissan	Japan	8
5	Beetle	Volkswagen	Germany	21
6	Etios	Toyota	Japan	7.2
7	Sail	Chevrolet	USA	5
8	Aria	Tata	India	7
9	Passat	Volkswagen	Germany	25
10	SX4	Maruti	Japan	6.7

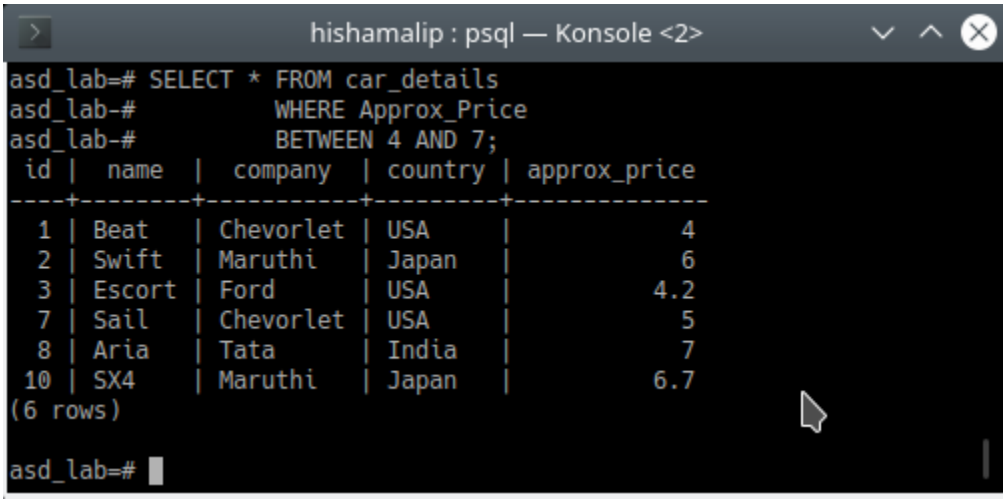


1. List the names of all companies as mentioned in the database

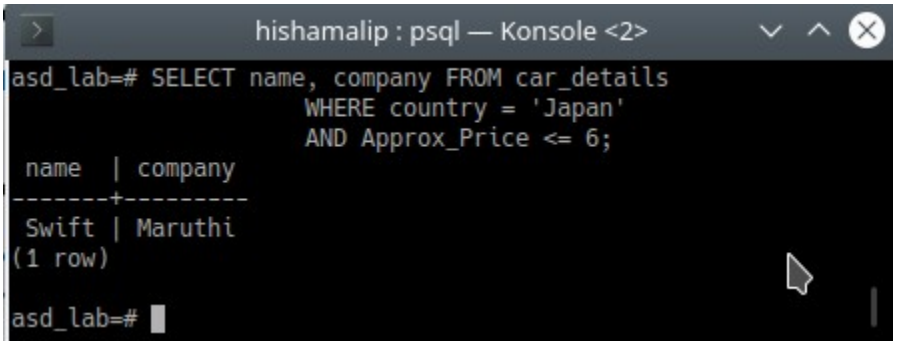
2. List the names of all countries having car production companies



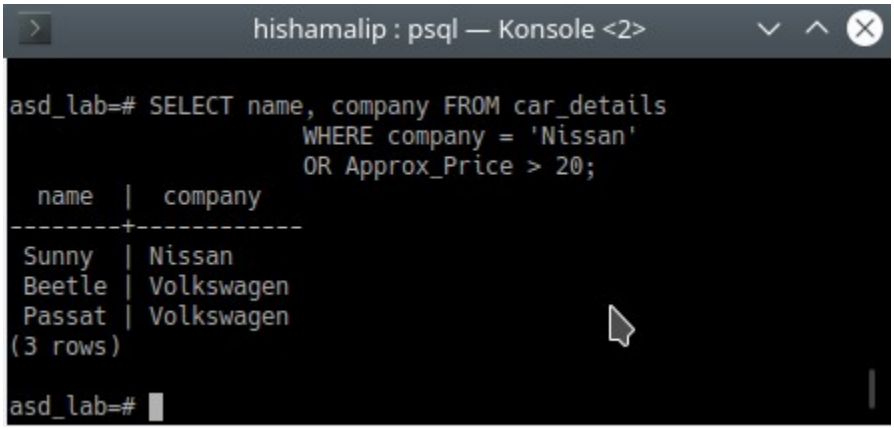
3. List the details of all cars within a price range 4 to 7 lakhs



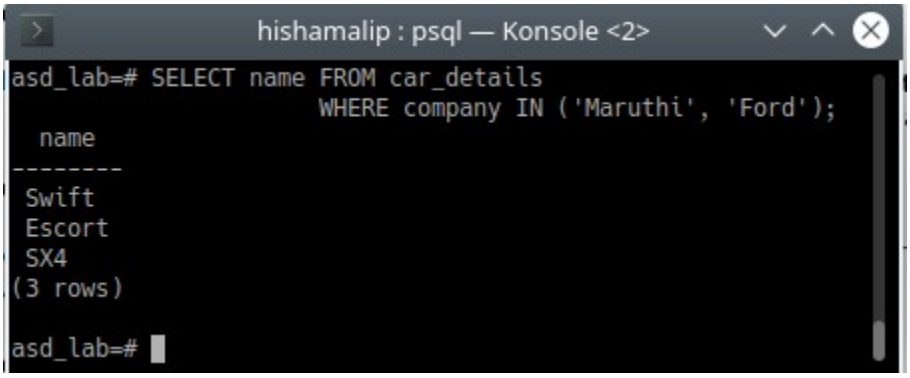
4. List the name and company of all cars originating from Japan and having price <=6 lakhs.



5. List the names and the companies of all cars either from Nissan or having a price greater than 20 lakhs.



6. List the names of all cars produced by (Maruti, Ford).Use SQL IN statement.



7. Alter the table cars to add a new field year (model release year). Update the year column for all the rows in the database.

```
asd_lab=# ALTER TABLE car_details ADD year INT;
ALTER TABLE
asd_lab=# UPDATE car_details SET year = 2015;
UPDATE 10
asd_lab=# SELECT * FROM car_details ;
 id | car_name |  company   | country | approx_price | year
----+----------+------------+---------+--------------+------
  1 | Beat     | Chevorlet  | USA     |            4 | 2015
  2 | Swift    | Maruthi    | Japan   |            6 | 2015
  3 | Escort   | Ford       | USA     |          4.2 | 2015
  4 | Sunny    | Nissan     | Japan   |            8 | 2015
  5 | Beetle   | Volkswagen | Germany |           21 | 2015
  6 | Etios    | Toyota     | Japan   |          7.2 | 2015
  7 | Sail     | Chevorlet  | USA     |            5 | 2015
  8 | Aria     | Tata       | India   |            7 | 2015
  9 | Passat   | Volkswagen | Germany |           25 | 2015
 10 | SX4      | Maruthi    | Japan   |          6.7 | 2015
(10 rows)
```

8. Display the names of all cars as Car_name (while displaying the name attribute should be listed as car_aliases)

```
asd_lab=# SELECT name AS car_aliases FROM car_details;
 car_aliases
-------------
 Beat
 Swift
 Escort
 Sunny
 Beetle
 Etios
 Sail
 Aria
 Passat
 SX4
(10 rows)
```

9. Rename the attribute name to car_name

```
asd_lab=# ALTER TABLE car_details RENAME name TO car_name;
ALTER TABLE
asd_lab=# select car_name from car_details ;
 car_name
----------
 Beat
 Swift
 Escort
 Sunny
 Beetle
 Etios
 Sail
 Aria
 Passat
 SX4
(10 rows)
```

10. List the car manufactured by Toyota(to be displayed as cars_Toyota)

```
asd_lab=# SELECT car_name AS cars_Toyota
asd_lab-#                 FROM car_details
asd_lab-#                 WHERE company = 'Toyota' ;
 cars_toyota
-------------
 Etios
(1 row)

asd_lab=#
```

11. List the details of all cars in alphabetical order.

```
asd_lab=# SELECT * FROM car_details ORDER BY car_name ;
 id | car_name |  company   | country | approx_price | year
----+----------+------------+---------+--------------+------
  8 | Aria     | Tata       | India   |            7 | 2015
  1 | Beat     | Chevorlet  | USA     |            4 | 2015
  5 | Beetle   | Volkswagen | Germany |           21 | 2015
  3 | Escort   | Ford       | USA     |          4.2 | 2015
  6 | Etios    | Toyota     | Japan   |          7.2 | 2015
  9 | Passat   | Volkswagen | Germany |           25 | 2015
  7 | Sail     | Chevorlet  | USA     |            5 | 2015
  4 | Sunny    | Nissan     | Japan   |            8 | 2015
  2 | Swift    | Maruthi    | Japan   |            6 | 2015
 10 | SX4      | Maruthi    | Japan   |          6.7 | 2015
(10 rows)

asd_lab=#
```

12. List the details of all cars from cheapest to costliest.

```
asd_lab=# SELECT * FROM car_details ORDER BY approx_price ASC;
 id | car_name |  company   | country | approx_price | year
----+----------+------------+---------+--------------+------
  1 | Beat     | Chevorlet  | USA     |            4 | 2015
  3 | Escort   | Ford       | USA     |          4.2 | 2015
  7 | Sail     | Chevorlet  | USA     |            5 | 2015
  2 | Swift    | Maruthi    | Japan   |            6 | 2015
 10 | SX4      | Maruthi    | Japan   |          6.7 | 2015
  8 | Aria     | Tata       | India   |            7 | 2015
  6 | Etios    | Toyota     | Japan   |          7.2 | 2015
  4 | Sunny    | Nissan     | Japan   |            8 | 2015
  5 | Beetle   | Volkswagen | Germany |           21 | 2015
  9 | Passat   | Volkswagen | Germany |           25 | 2015
(10 rows)

asd_lab=#
```

RESULT :

The query was executed successfully and output was verified.