**Trip Planning Project**

**Note: Text in bold are additions from my side**

**Prepare Trip Database with following tables:**

User Trip Expense Traveller

U\_id (P.K.) T\_id (P.K.) E\_id (P.K.) Tr\_id (P.K.)

U\_name T\_name T\_id (F.K.) T\_id (F.K.)

U\_mobile T\_start\_date U\_id (F.K.) U\_id (F.K.)

U\_email T\_end\_date E\_name

Password T\_creator\_id (F.K. (User (U-id))) E\_category

age **T\_route (F.K (Route (R\_id)))** E\_amount **T\_trip\_package(F.K (Trip\_package(tp\_id)))**

**Route Trip\_package Destinations**

**R\_id (P.K) tp\_id (P.K) id (F.K(Trip\_package(tp\_id))**

**tp\_title destination**

**R\_start\_point tp\_duration**

**R\_end\_point tp\_category**

**R\_distance tp\_cost**

**R\_travel\_mode tp\_available**

**R\_travel\_duration**

**Route Table contains details for different routes.**

**Trip\_packages contains travel destinations packag. Whereas trip table will contain details of the actual trip taken by a user for one or more travel packages**

**A traveler is a user who goes on a trip.**

**Queries on Tables of Trip Database for reports:**

1. Find total expense occurred by all travelers who travelled between 10-feb-19 and 15-feb-19.

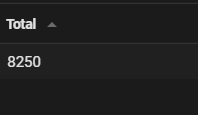
Sol]

SELECT SUM(amount) 'Total', trip\_id

FROM expense

WHERE trip\_id IN (SELECT id FROM trip WHERE start\_date BETWEEN '2019/02/10' AND '2019/02/15');

Output:



1. Find out number of times each user has travelled till date.

Sol]

SELECT u.name 'user', COUNT(tr.trip\_id) 'No Of Times Travelled'

FROM traveller tr LEFT JOIN user u ON tr.user\_id=u.id

GROUP BY tr.user\_id

ORDER BY tr.user\_id;

Output:



1. Find user wise trip details arranged in ascending order.

Sol]

SELECT tr.user\_id, u.name 'Name', t.name 'Trip', tp.title 'Trip Package', tp.category, t.start\_date, t.end\_date, r.start\_point, r.end\_point, tp.duration

FROM traveller tr LEFT JOIN user u ON tr.user\_id=u.id

LEFT JOIN trip t ON tr.trip\_id=t.id

LEFT JOIN trip\_package tp ON t.trip\_package\_id=tp.id

LEFT JOIN route r ON t.route\_id=r.id

ORDER BY tr.user\_id;

Output:



1. Find name of users who has spent more than 1 lac on their trips in year 2018.

Sol]

SELECT name, result.trip, result.start\_date,Total FROM(

SELECT e.user\_id, u.name, t.start\_date, t.name 'Trip', SUM(e.amount) 'Total'

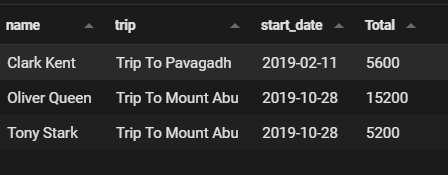
FROM expense e LEFT JOIN user u ON e.user\_id=u.id

INNER JOIN trip t ON e.trip\_id=t.id AND t.start\_date LIKE '2019-\_\_-\_\_'

GROUP BY e.user\_id) result

WHERE result.total > 4000;

Output:



1. Find total amount spend by all users.

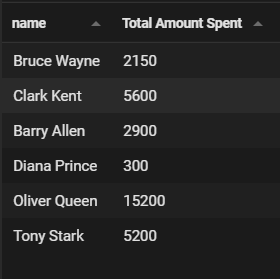
Sol]

SELECT u.name, result.total 'Total Amount Spent'

FROM (SELECT e.\*, SUM(e.amount) 'total' FROM expense e GROUP BY e.user\_id) result

LEFT JOIN user u ON result.user\_id=u.id;

Output:



1. Find name of all users.

Sol]

SELECT name FROM user;

Output:



1. **Find expense details for all users by categories**

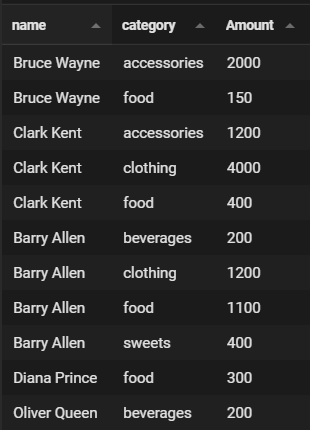
Sol]

SELECT u.name, category, SUM(amount) 'Amount'

FROM expense e LEFT JOIN user u ON e.user\_id=u.id

GROUP BY user\_id, category;

Output:



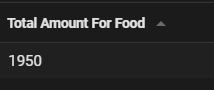
1. Find the total amount spent by all users for expense category “food”.

Sol]

SELECT SUM(e.amount) 'Total Amount For Food'

FROM expense e WHERE e.category='food';

Output:



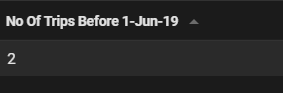
1. Find total number of trips before 1-jun-19.

Sol]

SELECT COUNT(t.id) 'No Of Trips Before 1-Jun-19'

FROM trip t WHERE t.start\_date < '2019-06-01';

Output:



1. Find in which year users have travelled for trips.

Sol]

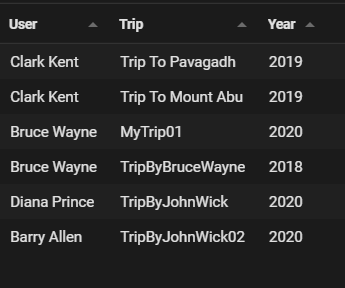
SELECT u.name 'User', t.name 'Trip', YEAR(t.start\_date) 'Year'

FROM traveller tr LEFT JOIN trip t ON tr.trip\_id=t.id

LEFT JOIN user u ON tr.user\_id=u.id

GROUP BY t.id;

Output:



1. **Find total trips based on trip category; for eg No of Trips for category Adventure.**

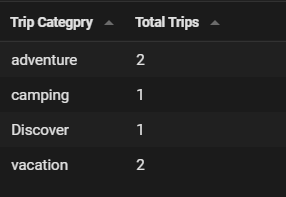
**Sol]**

SELECT tp.category 'Trip Categpry', COUNT(tp.category) 'Total Trips'

FROM trip t LEFT JOIN trip\_package tp ON t.trip\_package\_id=tp.id

GROUP BY tp.category;

Output:



1. **Find No of users for each type of trip.**

**Sol]**

SELECT tp.category 'Type Of Trip', COUNT(category) 'No Of Trip'

FROM traveller tr LEFT JOIN trip t ON tr.trip\_id=t.id

LEFT JOIN trip\_package tp ON t.trip\_package\_id=tp.id

GROUP BY tp.category;

Output:

