--SQL Queries

SET search_path TO Tourism_Management_System;

--1) Retrieve the packages within a particular price range

SELECT * FROM package WHERE amount >= 15000 and amount <= 20000;

--2) Show the list of top 5 packages based on the number of users who selected it.

SELECT COUNT (pack.packageid), pack.title, pack.duration, pack.no_of_people, pack.amount FROM package AS pack

JOIN (SELECT * FROM Booking_for_package) AS bfp ON (bfp.PackageID = pack.PackageID)

GROUP BY pack.title, pack.duration, pack.amount, pack.no_of_people

ORDER BY COUNT (pack.packageID) DESC;

--3)   View list of all the tourist spots at a particular location.

SELECT ts."Name", ts.season, ts.ratings,

 CONCAT (ts.address,', ',l.city,', ',l.state, ' - ',ts.pincode) AS "Address"

FROM tourist_spots AS ts JOIN location AS l ON ts.pincode = l.pincode

where l.city = 'Kullu';

--4)   View the tourist spots included in "abc" package.

SELECT p.title, p.duration, p.no_of_people, p.amount,

ts."Name", ts.season, ts.ratings,

CONCAT (ts.address,', ',l.city,', ',l.state, ' - ',ts.pincode) AS "Address"

FROM tourist_spots AS ts

JOIN package_includes_spots pt ON(pt.spotid = ts.spotid)

JOIN package AS p ON (p.packageid = pt.packageid)

JOIN location AS l ON ts.pincode = l.pincode

where p.title = 'Manali Tour';

--5) Retrieve the tourist spot with highest user ratings

SELECT "Name", season, ts2.ratings,

CONCAT (ts1.address,', ', l.city,', ',l.state, ' - ',ts1.pincode) AS "Address"

FROM tourist_spots AS ts1

JOIN (SELECT MAX (ratings) AS ratings FROM tourist_spots) AS ts2

ON (ts1.ratings = ts2.ratings)

JOIN Location as l ON (ts1.pincode = l.pincode);

--6)   View all the restaurants that serve "only veg" food.

SELECT r."Name", r.phone, r.foodType, r.ratings,

CONCAT (r.address,', ', l.city, ', ', l.state, ' - ', r.pincode) AS "Address"

FROM restaurant AS r JOIN location AS l ON r.pincode = l.pincode

where r.foodType = 'VEG';

--7)   Retrieve list of all the restaurants at "abc" location.

SELECT r."Name", r.phone, r.foodType, r.ratings,

CONCAT (r.address,', ', l.city, ', ', l.state, ' - ', r.pincode) AS "Address"

FROM restaurant AS r JOIN location AS l ON r.pincode = l.pincode

where l.city = 'Ahmedabad';

--8)   View all the restaurants that have "Chinese" cuisine included in their menu.

SELECT r."Name", r.phone, r.foodType, r.ratings, rc.cuisines,

CONCAT (r.address,', ', l.city, ', ', l.state, ' - ', r.pincode) AS "Address"

FROM restaurant AS r JOIN location AS l ON r.pincode = l.pincode

JOIN restaurant_cuisines AS rc ON r.rid = rc.rid WHERE rc.cuisines = 'Chinese';

--9)   Retrieve all the hotels that are situated at location "xyz".

SELECT h."Name", h.phone, h.foodType, h.ratings,

CONCAT (h.address,', ', l.city,', ', l.state,' - ', h.pincode) AS "Address"

FROM hotel AS h JOIN location AS l ON h.pincode = l.pincode WHERE l.city = 'Ahmedabad';

--10)   Retrieve list of hotels that are providing "xyz" services.

SELECT h."Name", h.phone, h.foodType, h.ratings,hs.services,

CONCAT (h.address,', ', l.city,', ', l.state,' - ', h.pincode) AS "Address"

FROM hotel AS h JOIN location AS l ON h.pincode = l.pincode

JOIN hotel_services AS hs ON h.hotelid = hs.hotelid

where hs.services = 'Gym';

--11)   Retrieve the hotel with highest user ratings

SELECT h."Name", h.phone, h.foodType, h.ratings,

CONCAT (h.address,', ', l.city,', ', l.state,' - ', h.pincode) AS "Address"

FROM hotel AS h JOIN location AS l ON h.pincode = l.pincode

where h.ratings IN (SELECT max(ratings) from hotel);

--12)   Retrieve list of hotels sorted according to their user ratings.

SELECT h."Name", h.phone, h.foodType, h.ratings,

CONCAT (h.address,', ', l.city,', ', l.state,' - ', h.pincode) AS "Address"

FROM hotel AS h JOIN location AS l ON h.pincode = l.pincode

ORDER BY h.ratings DESC;

--13)   View list of hotel rooms starting from the Lowest Price to Highest Price.

SELECT h."Name" As "Hotel_Name", r.room_no AS "Room_Number", r."Type" AS "Room_Type",

r.beds AS "No_of_Beds", r.capacity AS "Capacity", r.rate AS "Price", r.status As "Current_Status"

FROM hotel AS h JOIN room AS r ON h.hotelid = r.hotelid

ORDER BY r.rate,h."Name", r.room_no;

--14) Retrieve list of hotel rooms that have "Cable TV" facility at a particular location.

SELECT h."Name" As "Hotel_Name",r.room_no AS "Room_Number", r."Type" AS "Room_Type",

r.beds AS "No_of_Beds", r.capacity AS "Capacity", r.rate AS "Price", r.status As "Current_Status", rf.facility, l.city

FROM hotel AS h JOIN location AS l ON h.pincode = l.pincode

JOIN room AS r ON h.hotelid = r.hotelid

JOIN room_facilities AS rf ON (h.hotelid=rf.hotelid and r.room_no=rf.roomno)

WHERE rf.facility='Cable TV' and l.city = 'Amritsar'

ORDER BY h."Name", r.room_no;

--15) Retrieve all the packages associated with a particular guide. (admin)

SELECT CONCAT (g.fname,' ', g.lname) AS "Guide_Name",

p.title AS "Package_Name", p.duration as "Duration (In Days)",

p.no_of_people AS "No_Of_People", p.amount AS "Amount"

FROM guide AS g JOIN package_includes_guides AS pg ON (g.guideid=pg.guideid)

JOIN package AS p ON (pg.packageid=p.packageid)

WHERE g.fname='Sachin' and g.lname='Bhide';

--16) Retrieve the list of all package associated with a particular hotel.

SELECT h."Name" AS "Hotel_Name",

p.title AS "Package_Name", p.duration as "Duration (In Days)",

p.no_of_people AS "No_Of_People", p.amount AS "Amount"

FROM hotel AS h JOIN package_includes_hotels AS ph ON (h.hotelid=ph.hotelid)

JOIN package AS p ON (ph.packageid=p.packageid)

WHERE h."Name"='Hotel Thomas Villa';

--17) Retrieve all the packages which include "xyz" spots.

SELECT t."Name" AS "Spot_Name",

p.title AS "Package_Name", p.duration as "Duration (In Days)",

p.no_of_people AS "No_Of_People", p.amount AS "Amount"

FROM tourist_spots AS t JOIN package_includes_spots AS ps ON (t.spotid=ps.spotid)

JOIN package AS p ON (ps.packageid=p.packageid)

WHERE t."Name"='Manali';

--18)   Best tourist place to visit in "xyz" season.

SELECT ts."Name" AS "Spot_Name", ts.season AS "Season", ts.ratings AS "Ratings",

CONCAT (ts.address,', ',l.city,', ',l.state, ' - ',ts.pincode) AS "Address"

FROM tourist_spots AS ts JOIN "location" AS l

ON ts.pincode=l.pincode

WHERE ts.season='Winter';

--19)   Name and address of hotels which provides rooms between specific price range.

SELECT h."Name" As "Hotel_Name",r.room_no AS "Room_Number", r."Type" AS "Room_Type",

r.beds AS "No_of_Beds", r.capacity AS "Capacity", r.rate AS "Price", r.status As "Current_Status",

rf.facility, CONCAT(h.address,', ', l.city,', ', l.state,' - ', h.pincode) AS "Address"

FROM hotel AS h JOIN location AS l ON h.pincode = l.pincode

JOIN room AS r ON h.hotelid = r.hotelid

LEFT JOIN room_facilities AS rf ON (h.hotelid=rf.hotelid and r.room_no=rf.roomno)

WHERE r.rate between 1500 and 2000

ORDER BY r.rate, h."Name", r.room_no;

--20)   Retrieve list of all the guides which are not associated with any active packages.

SELECT CONCAT (g.fname,' ', g.lname) AS "Guide_Name", g.email, g.phone, g.age, g.gender,

CONCAT (g.address,', ',l.city,', ',l,state,' - ',g.pincode) AS "Address"

FROM guide AS g JOIN "location" AS l ON (g.pincode=l.pincode)

WHERE g.guideid NOT IN

(SELECT guideid from package_includes_guides AS pg

JOIN (Select * from package where isActive='TRUE') AS p ON (pg.packageid=p.packageid));

--21) Which hotel have availability of room right now?

SELECT hl."Name", rooms ,hl.ratings, hl.address FROM hotel as hl

JOIN

(SELECT r.hotelid, COUNT(r.room_no) AS rooms FROM room AS r

JOIN hotel AS h

ON (r.hotelid = h.hotelid) GROUP BY r.hotelid) as x

ON (x.hotelid = hl.hotelid) WHERE rooms > 0 AND hl.isactive = true;

--22) Number of rooms available at a particular hotel right now.

SELECT COUNT (*) FROM room as r

JOIN

hotel AS h ON (r.hotelid = h.hotelid)

WHERE h."Name" = 'Ahdoos Hotel' AND r.status = 'AVAILABLE';

--23) Retrieve all the previous bookings of user. (both)

SELECT b.booking_date, bfc.no_of_co_passengers, b.tripstart_date, b.tripend_date, b.amount, p.title AS package_name, hp."Name" as package_hotel, pih.RoomNo package_roomno,h."Name" AS hotel_name, bfh.roomno FROM booking as b

LEFT JOIN

(SELECT COUNT(c.fname) AS no_of_co_passengers, c.bid FROM booking_copassenger c GROUP BY c.bid) AS bfc ON (bfc.bid = b.bid)

FULL OUTER JOIN booking_for_package AS bfp ON (bfp.bid = b.bid)

FULL OUTER JOIN package AS p ON (bfp.packageid = p.packageid)

FULL OUTER JOIN booking_for_hotel AS bfh ON (bfh.bid = b.bid)

FULL OUTER JOIN hotel AS h ON (bfh.hotelid = h.hotelid)

FULL OUTER JOIN Package_Includes_Hotels AS pih ON (pih.packageid = p.packageid)

FULL OUTER JOIN hotel AS hp ON (hp.hotelid = pih.hotelid)

JOIN "User" AS u ON (b.userid = u.userid)

WHERE CONCAT (u.fname, ' ', u.lname) = 'Viral Gandhi';

--24) Retrieve the bookings between particular date of "xyz" user. (admin)

SELECT CONCAT(u.fname,' ',u.lname), b.booking_date, bfc.no_copassengers, b.tripstart_date, b.tripend_date,

b.amount, p.title AS package_name,hp."Name" as package_hotel, pih.RoomNo package_roomno, h."Name" AS hotel_name, bfh.roomno

FROM booking as b

LEFT JOIN

(SELECT COUNT(c.fname) AS no_copassengers, c.bid FROM booking_copassenger c GROUP BY c.bid) AS bfc ON (bfc.bid = b.bid)

FULL OUTER JOIN booking_for_package AS bfp ON (bfp.bid = b.bid)

FULL OUTER JOIN package AS p ON (bfp.packageid = p.packageid)

FULL OUTER JOIN booking_for_hotel AS bfh ON (bfh.bid = b.bid)

FULL OUTER JOIN hotel AS h ON (bfh.hotelid = h.hotelid)

FULL OUTER JOIN Package_Includes_Hotels AS pih ON (pih.packageid = p.packageid)

FULL OUTER JOIN hotel AS hp ON (hp.hotelid = pih.hotelid)

JOIN "User" AS u ON (b.userid = u.userid)

WHERE CONCAT(u.fname, ' ', u.lname) = 'Viral Gandhi'

AND b.booking_date < '2020-11-14' AND b.booking_date >= '2020-11-09';

--25) Retrieve all the bookings between particular date. (admin)

SELECT CONCAT(u.fname,' ',u.lname), b.booking_date, bfc.no_copassengers, b.tripstart_date, b.tripend_date,

b.amount, p.title AS package_name,hp."Name" as package_hotel, pih.RoomNo package_roomno, h."Name" AS hotel_name, bfh.roomno

FROM booking as b

LEFT JOIN

(SELECT COUNT(c.fname) AS no_copassengers, c.bid FROM booking_copassenger c GROUP BY c.bid) AS bfc ON (bfc.bid = b.bid)

FULL OUTER JOIN booking_for_package AS bfp ON (bfp.bid = b.bid)

FULL OUTER JOIN package AS p ON (bfp.packageid = p.packageid)

FULL OUTER JOIN booking_for_hotel AS bfh ON (bfh.bid = b.bid)

FULL OUTER JOIN hotel AS h ON (bfh.hotelid = h.hotelid)

FULL OUTER JOIN Package_Includes_Hotels AS pih ON (pih.packageid = p.packageid)

FULL OUTER JOIN hotel AS hp ON (hp.hotelid = pih.hotelid)

JOIN "User" AS u ON (b.userid = u.userid)

WHERE b.booking_date < '2020-11-14' AND b.booking_date >= '2020-11-09';

--26) Retrieve all the details of user of "xyz" hotel room. (admin)

SELECT CONCAT(u.fname, ' ', u.lname) AS user_name, u.phone, u.email, u.age, b.booking_date FROM "User" as u

JOIN booking AS b ON (u.userid = b.userid)

JOIN booking_for_hotel AS bfh ON (b.bid = bfh.bid)

JOIN hotel AS h ON (bfh.hotelid = h.hotelid)

JOIN room AS r ON (r.hotelid = h.hotelid) WHERE h."Name" = 'Hotel Kashi'

AND r.room_no = 5;

--27) Retrieve all the user booking details of "xyz" hotel. (admin)

SELECT CONCAT(u.fname, ' ', u.lname) AS user_name, b.booking_date, bfh.roomno FROM "User" as u

JOIN booking AS b ON (u.userid = b.userid)

JOIN booking_for_hotel AS bfh ON (b.bid = bfh.bid)

JOIN hotel AS h ON (bfh.hotelid = h.hotelid)

WHERE h."Name" = 'Hotel Kashi';

--28) Give details of co-passenger with "xyz" user with dates. (admin)

SELECT CONCAT (u.fname, ' ', u.lname) AS user_name, b.booking_date,

CONCAT(c.fname, ' ', c.lname) as copassenger, c.phone, c.gender, c.age

FROM "User" as u

JOIN booking AS b ON (u.userid = b.userid)

JOIN booking_copassenger AS bc ON (bc.bid = b.bid)

JOIN copassenger AS c ON (bc.userid = c.uid AND bc.fname = c.fname AND bc.lname = c.lname)

WHERE CONCAT(u.fname, ' ', u.lname) = 'Viral Gandhi';