Lab 6 – Aggregate Function

Demo Lab for E-Bike

1] Find the Average **Price of the Parts**.

SELECT AVG(Price) FROM Parts;

AVG(Price)
2189.621667

2] Determine the salesperson ID who has Amount greater than average Amount.

SELECT i.S_emp_id
FROM Generate_Invoice AS i
WHERE i.Amount>(SELECT AVG(i.Amount) FROM Generate_Invoice AS i);

SalesPersonID
103

3] Find sum, maximum, minimum, average and count of **Total_Bill** in invoice.

SELECT MAX(Total_Bill), MIN(Total_Bill), SUM(Total_Bill), AVG(Total_Bill), COUNT(Total_Bill) FROM `invoice`;

MAX(Total_Bill)	MIN(Total_Bill)	SUM(Total_Bill)	AVG(Total_Bill)	COUNT(Total_Bill)
908907.87	78900.90	1450330.61	241721.768333	6

4] Retrieve all the details of parts which is having maximum price.

*SELECT * FROM parts WHERE price = (SELECT MAX (price) FROM parts);*

P_ID	Description	Qty	Price	Service_ID
705	Leg Guard	101	6217.99	403

5] **Retrieve all the details dealers that are located in ‘Bengaluru’, ‘Mumbai’ or ‘Pune’**

*SELECT * FROM dealer WHERE City IN (‘Bengaluru’, ‘Mumbai’ or ‘Pune’);*

Dealer_ID	Name	street	city	state	PIN
1	Ajit	Brigade Road	Bangalore	Karnataka	560001
2	Rudra	Bhashyam Circle	Bangalore	Karnataka	560010
3	Arjun	Bapuji Nagar	Bangalore	Karnataka	560026
4	Mohamad	Chickpet	Bangalore	Karnataka	560053
5	Nirmala	Domlur	Bangalore	Karnataka	560071
6	Raghu	HSR Layout	Bangalore	Karnataka	560102
7	Likith	Hosur Road	Bangalore	Karnataka	560030
8	Kiran	Indira Nagar	Bangalore	Karnataka	560038
9	Sherif	JP Nagar	Bangalore	Karnataka	560078
10	Tanish	Kannur	Bangalore	Karnataka	562149
11	Mahesh	Adyar	Chennai	Karnataka	600020
12	Margaret	Anna Nagar	Chennai	Tamil Nadu	600040
13	Nadish	Broadway	Chennai	Tamil Nadu	600108
14	Virat	Chepak	Chennai	Tamil Nadu	600005
15	Vikram	Defence Colony	Chennai	Tamil Nadu	600032
16	Deepak	Ambewadi	Mumbai	Maharashtra	400004
17	Subash	Cumballa Hill	Mumbai	Maharashtra	400026
18	Sudeep	Goregaon	Mumbai	Maharashtra	400062
19	Farahn	Jacob Circle	Mumbai	Maharashtra	400011
20	Ganish	Mandvi	Mumbai	Maharashtra	400003

6] Retrieve the count of the city of dealers.

SELECT COUNT(*), city FROM dealer GROUP BY city;

Cout(*)	City
10	Bangalore
5	Chennai
5	Mumbai

7] Display customer id and average amount for that customer whose bill count is more than one.
SELECT i.cust_id, AVG(total_bill) FROM invoice i, customer c WHERE i.cust_id=c.cust_id GR OUP BY (c.cust_id) HAVING COUNT(*)>1;

cust_id	AVG(total_bill)
201	120544.935000

8] Retrieve model number, bike id, price of the bike whose service is not the first service.

SELECT b.vin, model FROM service_ticket s, bike b WHERE s.vin=b.vin GROUP BY vin HAVING COUNT(*)>1;

vin	model
300	CB500X

Railway Reservation System

Tasks:

1. Find the average distance between subsequent stations for every train
2. Find the average distance between subsequent stations for every train and display them in descending order
3. Display the list of train numbers and the distance traveled by each in descending order of the distance traveled
4. List those trains that have maximum and minimum number compartments as train name and number of compartments
5. Display the number of phone numbers corresponding to the user_id(s) ADM_001, USR_006, USR_10
6. Find the average fare per km for each train type specified and display the train type and corresponding average fare per km as 'Avg_Fare' in decreasing order of Avg_Fare
7. Retrieve all details of the oldest passenger.
8. Count the number of passengers whose name consists of 'Ullal'. (Hint: Use the LIKE operator)

Deliverables::

1. Create screenshots for each task, with the query and the result together. Paste all of them in a word file with appropriate labels (task1, task2 etc) . Convert the docx into a pdf file and submit.
2. A .sql file named as SRN_Lab6.sql with all the sql queries. (Separate each query by a commented line)