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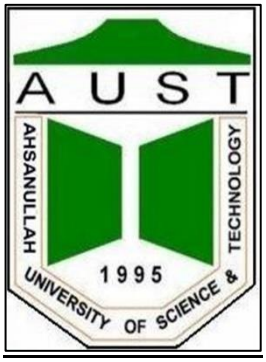

Department of Computer Science and Engineering Program:
BSc in Computer Science and Engineering

Assignment No: 04

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CSE 3104 – Assignment 04

Assume that the following tables exist containing the displayed data.

sample table: *Salesman*

salesman_id	name	city	commission
5001	James Hoog	New York	0.15
5002	Nail Knite	Paris	0.13
5005	Pit Alex	London	0.11
5006	Mc Lyon	Paris	0.14
5007	Paul Adam	Rome	0.13
5003	Lauson Hen	San Jose	0.12

sample table: *Customer*

customer_id	customer_name	city	grade	salesman_id
3002	Nick Rimando	New York	100	5001
3007	Brad Davis	New York	200	5001
3005	Graham Zusi	California	200	5002
3008	Julian Green	London	300	5002
3004	Fabian Johnson	Paris	300	5006
3009	Geoff Cameron	Berlin	100	5003
3003	Jozy Altidor	Moscow	200	5007
3001	Brad Guzan	London		5005

sample table: *Order*

order_id	purchase_amount	customer_id	salesman_id
7001	150.5	3005	5002
7009	270.5	3001	5005
7002	65.5	3002	5001
7004	110	3009	5003
7007	948.5	3005	5002
7005	2400	3007	5001
7008	5760	3002	5001
7010	1983	3004	5006

7003	2480	3009	5003
7012	250.5	3008	5002
7011	76	3003	5007
7013	3045	3002	5001

1. Write a SQL query to find all the orders along with their details issued by the salesman Paul Adam.
2. Write a SQL query to find all orders along with their details generated by Paris-based salespeople.

3. Write a SQL query to count the number of customers with grades above the average in New York City.
4. Write a SQL query to find salespeople who had more than one customer.
5. Write a SQL query to find salespeople who deal with a single customer.
6. Write a SQL query to find the salespeople who deal the customers with more than one order.
7. Write a SQL query to find those orders where every order amount is less than the maximum order amount of a customer who lives in London City.
8. Write a SQL query to find those customers whose grades are not the same as those who live in London City.
9. Write a SQL query to find those customers whose grades are different from those living in Paris.
1. Write a SQL query to find the number of customers who have different grades than any customer who living in California

Solution:

```
create database mydb;

drop table Salesman;
create table Salesman
(
  salesman_id int primary key,
  name varchar(200),
  city varchar(200),
  commision float(25)

);
drop table Customer;
create table Customer
(
  customer_id int primary key,
  customer_name varchar(200),
  city varchar(200),
  grade int,
  salesman_id int

);
drop table Orders;
create table Orders
(
  order_id int primary key,
  purchase_amount float(25),
  customer_id int,
  salesman_id int

);

INSERT INTO Salesman values (5001,'james Hoog','New York',0.15);
INSERT INTO Salesman values (5002,'Nail Knite','Paris',0.13);
INSERT INTO Salesman values (5005,'Pit Alex','London',0.11);
INSERT INTO Salesman values (5006,'Mc Lyon','Paris',0.14);
INSERT INTO Salesman values (5007,'Paul Adam','Rome',0.13);
INSERT INTO Salesman values (5003,'Lauson Hen','San Jose',0.12);

INSERT INTO Customer values (3002,'Nick Rimando','New York',100,5001);
INSERT INTO Customer values (3007,'Brad Davis','New York',200,5001);
INSERT INTO Customer values (3005,'Graham Zusi','California',200,5002);
INSERT INTO Customer values (3008,'Julian Green','London',300,5002);
INSERT INTO Customer values (3004,'Fabian Johnson','Paris',300,5006);
INSERT INTO Customer values (3009,'Geoff Cameron','Berlin',100,5003);
INSERT INTO Customer values (3003,'Jozy Altdor','Moscow',200,5007);
INSERT INTO Customer (customer_id,customer_name,city,salesman_id) values (3001,'Brad
Guzan','London',5005);

INSERT INTO Orders values (7001,150.5,3005,5002);
INSERT INTO Orders values (7009,270.5,3001,5005);
INSERT INTO Orders values (7002,65.6,3002,5001);
INSERT INTO Orders values (7004,110,3009,5003);
INSERT INTO Orders values (7007,948.5,3005,5002);
```

```
INSERT INTO Orders values (7005,2400,3007,5001);
INSERT INTO Orders values (7008,5760,3002,5001);
INSERT INTO Orders values (7010,1983,3004,5006);
INSERT INTO Orders values (7003,2480,3009,5003);
INSERT INTO Orders values (7012,250.5,3008,5002);
INSERT INTO Orders values (7011,76,3003,5007);
INSERT INTO Orders values (7013,3045,3002,5001);

select * from Salesman;
select * from Customer;
select * from Orders;
```

1.
```
select * from Orders
where salesman_id = (select salesman_id from Salesman where name='Paul Adam');
```

2.
```
select * from Orders
where salesman_id in (select salesman_id from Salesman where city='Paris');
```

3.
```
select count(*) from Customer
where grade >
(
 select avg(grade) from Customer where city='New York'

)
```

4.
```
 select * from Salesman
 where salesman_id in (select salesman_id from Customer group by salesman_id having
 count(salesman_id)> 1);
```

5.
```
select * from Salesman
where salesman_id in (select salesman_id from Customer group by salesman_id having
count(salesman_id)=1);
```

6.
```
select * from salesman
where salesman_id in
(
 select salesman_id from Customer where customer_id in
 (
  select customer_id from Orders group by customer_id having count(customer_id) > 1
 )
);
```

7.
```
 select * from Orders
 where purchase_amount <
 (
  select max(purchase_amount) from Orders where customer_id in
  (
   select customer_id from Customer where city='London'
  )
 );
```

8.
```sql
select * from Customer
where grade <> Any
(
  select grade from Customer where city='London'
);
```

9.
```sql
 select * from Customer
  where grade <> Any
 (
  select grade from Customer where city='Paris'
 );
```

10.
```sql
select count(*) from Customer
where grade <> Any
(
 select grade from Customer where city='California'
);
```