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## **LAB ASSIGNMENT - 4**

**Table 1: SalesPeople**

**Snum** is Primary key

**Sname** is Unique constraint

<b>Snum</b>	<b>Sname</b>	<b>City</b>	<b>Comm</b>
1001	Peel	London	.12
1002	Serres	Sanjose	.13
1004	Motika	Landon	.11
1007	Rifkin	Barcelona	.15
1003	Axelrod	Newyork	.10

```
create table SalesPeople(  
    Snum int constraint snum_pk Primary Key,  
    Sname varchar(15) constraint sname_uq Unique,  
    City varchar(15),  
    Comm float  
);
```

```
desc SalesPeople;
```

```
insert into SalesPeople (Snum, Sname, City, Comm) values  
(1001, 'Peel', 'London', .12);
```

```
insert into SalesPeople (Snum, Sname, City, Comm) values  
(1002, 'Serres', 'Sanjose', .13);
```

```
insert into SalesPeople (Snum, Sname, City, Comm) values  
(1004, 'Motika', 'London', .11);
```

```
insert into SalesPeople (Snum, Sname, City, Comm) values  
(1007, 'Rifkin', 'Barcelona', .15);
```

```
insert into SalesPeople (Snum, Sname, City, Comm) values  
(1003, 'Axelrod', 'Newyork', .10);
```

```
select * from SalesPeople;
```

SNUM	SNAME	CITY	COMM
1001	Peel	London	.12
1002	Serres	Sanjose	.13
1004	Motika	London	.11
1007	Rifkin	Barcelona	.15
1003	Axelrod	Newyork	.1

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5 rows selected.

## **Table 2: Customers**

**Cnum** is Primary Key

**City** has not null constraint.

**Snum** is foreign key constraint refers Snum column of SalesPeople table.

<b>Cnum</b>	<b>Cname</b>	<b>City</b>	<b>Grade</b>	<b>Snum</b>
2001	Hoffman	London	100	1001
2002	Giovanni	Rome	200	1003
2003	Liu	Sanjose	200	1002
2004	Grass	Berlin	300	1002
2006	Clemens	London	300	1001
2008	Cisneros	Sanjose	100	1007
2007	Pereira	Rome	-	1004

```
create table Customers(
  Cnum int constraint cnum_pk Primary Key,
  Cname varchar(15),
  City varchar(15) constraint custcity_ntnull Not Null,
  Grade int,
  Snum int,
  Constraint snum_fk Foreign Key(Snum) References SalesPeople(Snum)
);
```

```
desc Customers;
```

```
insert into Customers (Cnum, Cname, City, Grade, Snum) values
(2001, 'Hoffman', 'London', 100, 1001);
```

```
insert into Customers (Cnum, Cname, City, Grade, Snum) values
(2002, 'Giovanni', 'Rome', 200, 1003);
```

```
insert into Customers (Cnum, Cname, City, Grade, Snum) values
```

```

(2003, 'Liu', 'Sanjose', 200, 1002);
insert into Customers (Cnum, Cname, City, Grade, Snum) values
(2004, 'Grass', 'Berlin', 300, 1002);
insert into Customers (Cnum, Cname, City, Grade, Snum) values
(2006, 'Clemens', 'London', 300, 1001);
insert into Customers (Cnum, Cname, City, Grade, Snum) values
(2008, 'Cisneros', 'Sanjose', 100, 1007);
insert into Customers (Cnum, Cname, City, Grade, Snum) values
(2007, 'Pereira', 'Rome', null, 1004);

```

```
select * from Customers;
```

CNUM	CNAME	CITY	GRADE	SNUM
2001	Hoffman	London	100	1001
2002	Giovanni	Rome	200	1003
2003	Liu	Sanjose	200	1002
2004	Grass	Berlin	300	1002
2006	Clemens	London	300	1001
2008	Cisneros	Sanjose	100	1007
2007	Pereira	Rome	-	1004

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7 rows selected.

### **Table 3: Orders Onum is Primary key**

**Cnum** is foreign key refers to Cnum column of Customers table.

**Snum** is foreign key refers Snum column of SalesPeople table.

Onum	Amt	Odate	Cnum	Snum
3001	18.69	3-10-1990	2008	1007
3003	767.19	3-10-1990	2001	1001
3002	1900.10	3-10-1990	2007	1004
3005	5160.45	3-10-1990	2003	1002
3006	1098.16	3-10-1990	2008	1007
3009	1713.23	4-10-1990	2002	1003
3007	75.75	4-10-1990	2004	1002
3008	4273.00	5-10-1990	2006	1001
3010	1309.95	6-10-1990	2004	1002

3011	9891.88	6-10-1990	2006	1001
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create table Orders(

Onum int constraint onum\_pk Primary Key,

Amt float,

Odate date,

Cnum int,

Snum int,

Constraint cnum\_fk Foreign Key(Cnum) References Customers(Cnum),

Constraint snum\_fk1 Foreign Key(Snum) References SalesPeople(Snum)

);

desc Orders;

insert into Orders (Onum, Amt, Odate,Cnum, Snum) values

(3001, 18.69, '3-OCT-1990', 2008, 1007);

insert into Orders (Onum, Amt, Odate,Cnum, Snum) values

(3003, 767.19, '3-OCT-1990', 2001, 1001);

insert into Orders (Onum, Amt, Odate,Cnum, Snum) values

(3002, 1900.10, '3-OCT-1990', 2007, 1004);

insert into Orders (Onum, Amt, Odate,Cnum, Snum) values

(3005, 5160.45, '3-OCT-1990', 2003, 1002);

insert into Orders (Onum, Amt, Odate,Cnum, Snum) values

(3006, 1098.16, '3-OCT-1990', 2008, 1007);

insert into Orders (Onum, Amt, Odate,Cnum, Snum) values

(3009, 1713.23, '4-OCT-1990', 2002, 1003);

insert into Orders (Onum, Amt, Odate,Cnum, Snum) values

(3007, 75.75, '4-OCT-1990', 2004, 1002);

insert into Orders (Onum, Amt, Odate,Cnum, Snum) values

(3008, 4273.00, '5-OCT-1990', 2006, 1001);

insert into Orders (Onum, Amt, Odate,Cnum, Snum) values

(3010, 1309.95, '6-OCT-1990', 2004, 1002);

insert into Orders (Onum, Amt, Odate,Cnum, Snum) values

(3011, 9891.88, '6-OCT-1990', 2006, 1001);

select \* from Orders;

ONUM	AMT	ODATE	CNUM	SNUM
3001	18.69	03-OCT-90	2008	1007
3003	767.19	03-OCT-90	2001	1001
3002	1900.1	03-OCT-90	2007	1004
3005	5160.45	03-OCT-90	2003	1002
3006	1098.16	03-OCT-90	2008	1007
3009	1713.23	04-OCT-90	2002	1003
3007	75.75	04-OCT-90	2004	1002
3008	4273	05-OCT-90	2006	1001
3010	1309.95	06-OCT-90	2004	1002
3011	9891.88	06-OCT-90	2006	1001

Download CSV  
10 rows selected.

## Assignment 6

- 1) **Count the number of Salesperson whose name begin with 'a'/'A'.**

select count(Sname) from SalesPeople where Sname like 'A%';

COUNT(SNAME)
1

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- 2) **Count the number of Salesperson belonging to Newyork.**

select count(Sname) from SalesPeople where City='Newyork';

COUNT(SNAME)
1

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- 3) **Count the number of Salespeople belonging to Landon andbelonging to Paris.**

select count(Sname) from SalesPeople where City in ('London', 'Paris');

COUNT(SNAME)
2

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**4) Counts the number of Salespeople registering orders each day.**

```
select count(Snum), Snum from Orders Group by Snum;
```

COUNT(SNUM)	SNUM
2	1007
1	1004
3	1001
3	1002
1	1003

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5 rows selected.

**5) Count the number of unique salespeople and return number of salespeople**

```
select count(distinct Sname) from SalesPeople;
```

COUNT(DISTINCTSNAME)
5

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**6) Display all the Salesperson whose all orders worth is more than Rs.2000.**

```
select Snum, Sum(Amt) from Orders Group by Snum having sum(Amt)>2000;
```

SNUM	SUM(AMT)
1001	14932.07
1002	6546.15

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2 rows selected.

**7) Display the number of orders taken by each Salesperson and their date of orders.**

```
select count(Onum), Odate, Snum from Orders Group by Snum, Odate Order by Odate asc;
```

COUNT(ONUM)	ODATE	SNUM
1	03-OCT-90	1001
1	03-OCT-90	1002
1	03-OCT-90	1004
2	03-OCT-90	1007
1	04-OCT-90	1002
1	04-OCT-90	1003
1	05-OCT-90	1001
1	06-OCT-90	1001
1	06-OCT-90	1002

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9 rows selected.

**8) Write a query that selects the first customer in alphabetical order, whose name begins with 'G'.**

select Cname from Customers where Cname like 'G%' order by Cname fetch first 1 row only;

CNAME
Giovanni

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**9) Find out the largest orders for Snum 1002 & 1007.**

select max(Amt), Snum from Orders where Snum in (1002, 1007) Group by Snum;

MAX(AMT)	SNUM
1098.16	1007
5160.45	1002

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2 rows selected.

**10) Find out the maximum single order amount of a Salesperson over Rs 3000 in a day.**

select max(Amt), Snum, Odate from Orders Group by Snum, Odate having max(Amt)>3000;

MAX(AMT)	SNUM	ODATE
5160.45	1002	03-OCT-90
4273	1001	05-OCT-90
9891.88	1001	06-OCT-90

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3 rows selected.

### 11) Find out the no. of Salesperson who belongs to same city and have same commission percentage.

```
select count(Snum), City, Comm from SalesPeople Group by City, Comm;
```

COUNT(SNUM)	CITY	COMM
1	London	.12
1	Newyork	.1
1	London	.11
1	Barcelona	.15
1	Sanjose	.13

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5 rows selected.

### 12) Calculate total purchase amount of all orders and return total purchase amount.

```
select sum(Amt) from Orders;
```

SUM(AMT)
26208.4

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### 13) Calculate average purchase amount of all orders and return average purchase amount

```
select avg(Amt) from Orders;
```

AVG(AMT)
2620.84

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### 14) Find the number of customers who got at least a gradation for his/her activity

```
select count(Cnum) from Customers where Grade is not null;
```



COUNT(CNUM)
6

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**15) Find the highest grade of the customers for each of the city and return city, maximum grade**

```
select max(Grade), City from Customers Group by City;
```

MAX(GRADE)	CITY
200	Rome
300	London
200	Sanjose
300	Berlin

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4 rows selected.

**16) Find the highest purchase amount ordered by each customer. Return customer ID, maximum purchase amount**

```
select max(Amt), Cnum from Orders Group by Cnum order by Cnum asc;
```

MAX(AMT)	CNUM
767.19	2001
1713.23	2002
5160.45	2003
1309.95	2004
9891.88	2006
1900.1	2007
1098.16	2008

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7 rows selected.

**17) Find the highest purchase amount ordered by each customer on a particular date. Return, order date and highest purchase amount**

```
select max(Amt), Odate, Cnum from Orders Group by Cnum, Odate Order by Odate asc;
```

MAX(AMT)	ODATE	CNUM
767.19	03-OCT-90	2001
5160.45	03-OCT-90	2003
1900.1	03-OCT-90	2007
1098.16	03-OCT-90	2008
1713.23	04-OCT-90	2002
75.75	04-OCT-90	2004
4273	05-OCT-90	2006
1309.95	06-OCT-90	2004
9891.88	06-OCT-90	2006

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9 rows selected.

**18) Find the highest purchase amount on 4-10-1990 by each salesperson. Return salesperson ID, purchase amount.**

select max(Amt), Snum from Orders where Odate='04-OCT-90' Group by Snum ;

MAX(AMT)	SNUM
75.75	1002
1713.23	1003

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2 rows selected.