

## 225229140 SURIYA S

### LAB-1

```
SQL> create table sale(salesman_id number(20),name varchar(20),city varchar(20),commission varchar(10));
```

Table created.

```
SQL> insert into sale(salesman_id,name,city,commission)values('&salesman_id','&name','&city','&commission');
```

Enter value for salesman\_id: 5001

Enter value for name: chandler

Enter value for city: new york

Enter value for commission: 0.12

```
old 1: insert into sale(salesman_id,name,city,commission)values('&salesman_id','&name','&city','&c
```

```
new 1: insert into sale(salesman_id,name,city,commission)values('5001','chandler','new york','0.12
```

1 row created.

```
SQL> /
```

Enter value for salesman\_id: 5002

Enter value for name: joey

Enter value for city: korea

Enter value for commission: 0.19

```
old 1: insert into sale(salesman_id,name,city,commission)values('&salesman_id','&name','&city','&c
```

```
new 1: insert into sale(salesman_id,name,city,commission)values('5002','joey','korea','0.19')
```

1 row created.

```
SQL> /
```

Enter value for salesman\_id: 5003

Enter value for name: monica

Enter value for city: paris

Enter value for commission: 0.15

```
old 1: insert into sale(salesman_id,name,city,commission)values('&salesman_id','&name','&city','&c
```

```
new 1: insert into sale(salesman_id,name,city,commission)values('5003','monica','paris','0.15')
```

1 row created.

```
SQL> /
```

Enter value for salesman\_id: 5004

Enter value for name: ross

Enter value for city: london

Enter value for commission: 0.18

```
old 1: insert into sale(salesman_id,name,city,commission)values('&salesman_id','&name','&city','&c
```

```
new 1: insert into sale(salesman_id,name,city,commission)values('5004','ross','london','0.18')
```

1 row created.

```
SQL> /
Enter value for salesman_id: 5005
Enter value for name: rachel
Enter value for city: tokyo
Enter value for commission: 0.16
old 1: insert into sale(salesman_id,name,city,commission)values('&salesman_id','&name','&city','&c
new 1: insert into sale(salesman_id,name,city,commission)values('5005','rachel','tokyo','0.16')
```

1 row created.

```
SQL> /
Enter value for salesman_id: 5006
Enter value for name: phoebe
Enter value for city: seoul
Enter value for commission: 0.25
old 1: insert into sale(salesman_id,name,city,commission)values('&salesman_id','&name','&city','&c
new 1: insert into sale(salesman_id,name,city,commission)values('5006','phoebe','seoul','0.25')
```

1 row created.

SQL> select \* from sale;

SALESMAN_ID	NAME	CITY	COMMISSION
5001	chandler	new york	0.12
5002	joey	korea	0.19
5003	monica	paris	0.15
5004	ross	london	0.18
5005	rachel	tokyo	0.16
5006	phoebe	seoul	0.25

6 rows selected.

## CUSTOMER TABLE

```
SQL> create table customertable(customer_id number(20),cust_name varchar(20),city varchar(20),grade
varchar(10),salesman_id number(20));
```

Table created.

```
SQL> insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('&customer_id','&
cust_name','&city','&grade','&salesman_id');
Enter value for customer_id: 1001
Enter value for cust_name: professor
Enter value for city: california
Enter value for grade: 100
Enter value for salesman_id: 5002
old 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('&customer_id
new 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('1001','profe
```

1 row created.

```
SQL> /
Enter value for customer_id: 1002
Enter value for cust_name: berlin
Enter value for city: russia
Enter value for grade: 200
Enter value for salesman_id: 5005
old 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('&customer_id
new 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('1002','berli
```

1 row created.

```
SQL> /
Enter value for customer_id: 1003
Enter value for cust_name: rio
Enter value for city: spain
Enter value for grade: 100
Enter value for salesman_id: 5001
old 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('&customer_id
new 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('1003','rio',
```

1 row created.

```
SQL> /
Enter value for customer_id: 1004
Enter value for cust_name: jenifer
Enter value for city: korea
Enter value for grade: 200
Enter value for salesman_id: 5002
old 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('&customer_id
new 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('1004','jenif
```

1 row created.

```
SQL> /
Enter value for customer_id: 1005
Enter value for cust_name: swetha
Enter value for city: seoul
Enter value for grade: 300
Enter value for salesman_id: 5006
old 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('&customer_id
new 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('1005','sweth
```

1 row created.

```
SQL> /
Enter value for customer_id: 1006
Enter value for cust_name: tae
Enter value for city: moscow
Enter value for grade: 100
Enter value for salesman_id: 5003
old 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('&customer_id
new 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('1006','tae',
```

1 row created.

```
SQL> /
Enter value for customer_id: 1007
Enter value for cust_name: suga
Enter value for city: paris
Enter value for grade: 200
Enter value for salesman_id: 5005
old 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('&customer_id
new 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('1007','suga'
```

1 row created.

```
SQL> /
Enter value for customer_id: 1008
Enter value for cust_name: jungkook
Enter value for city: london
Enter value for grade: 300
Enter value for salesman_id: 5004
old 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('&customer_id
new 1: insert into customertable(customer_id,cust_name,city,grade,salesman_id)values('1008','jungk
```

1 row created.

```
SQL> select * from customertable;
```

CUSTOMER_ID	CUST_NAME	CITY	GRADE	SALESMAN_ID
1001	professor	california	100	5002
1002	berlin	russia	200	5005
1003	rio	spain	100	5001
1004	jenifer	korea	200	5002
1005	swetha	seoul	300	5006
1006	tae	moscow	100	5003
1007	suga	paris	200	5005
1008	jungkook	london	300	5004

8 rows selected.

## ORDER TABLE

```
SQL> create table ordertable(ord_no number(20),purch_amt varchar(20),ord_date varchar(20),customer_id
number(10),salesman_id number(20));
```

Table created.

```
SQL> insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no','&purch
amt','&ord_date','&customer_id','&salesman_id');
Enter value for ord_no: 70001
Enter value for purch_amt: 150.5
Enter value for ord_date: 2012-10-05
Enter value for customer_id: 1008
Enter value for salesman_id: 5004
old 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no','
new 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('70001','15
```

```
SQL> insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no','&purch_amt','&ord_date','&customer_id','&salesman_id');
Enter value for ord_no: 70009
Enter value for purch_amt: 270.65
Enter value for ord_date: 2012-09-10
Enter value for customer_id: 1003
Enter value for salesman_id: 5001
old 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no','
new 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('70009','27
```

1 row created.

```
SQL> /
Enter value for ord_no: 70002
Enter value for purch_amt: 65.26
Enter value for ord_date: 2012-10-05
Enter value for customer_id: 1007
Enter value for salesman_id: 5005
old 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no','
new 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('70002','65
```

1 row created.

```
SQL> /
Enter value for ord_no: 70004
Enter value for purch_amt: 110.5
Enter value for ord_date: 2012-08-17
Enter value for customer_id: 1005
Enter value for salesman_id: 5006
old 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no','
new 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('70004','11
```

1 row created.

```
SQL> /
Enter value for ord_no: 70007
Enter value for purch_amt: 948.5
Enter value for ord_date: 2012-09-10
Enter value for customer_id: 1003
Enter value for salesman_id: 5001
old 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no','
new 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('70007','94
```

1 row created.

```

SQL> /
Enter value for ord_no: 70005
Enter value for purch_amt: 2400.6
Enter value for ord_date: 2012-07-27
Enter value for customer_id: 1006
Enter value for salesman_id: 5003
old 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no',
new 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('70005','24

1 row created.

SQL> /
Enter value for ord_no: 70008
Enter value for purch_amt: 5760
Enter value for ord_date: 2012-09-10
Enter value for customer_id: 1001
Enter value for salesman_id: 5002
old 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no',
new 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('70008','57

1 row created.

SQL> insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no','&purch_amt',
&ord_date','&customer_id','&salesman_id');
Enter value for ord_no: 70010
Enter value for purch_amt: 1983.43
Enter value for ord_date: 2012-10-10
Enter value for customer_id: 1002
Enter value for salesman_id: 5005
old 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no',
new 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('70010','19

1 row created.

SQL> /
Enter value for ord_no: 70003
Enter value for purch_amt: 2480.4
Enter value for ord_date: 2012-10-10
Enter value for customer_id: 1007
Enter value for salesman_id: 5005
old 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no',
new 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('70003','24

1 row created.

SQL> /
Enter value for ord_no: 70012
Enter value for purch_amt: 250.45
Enter value for ord_date: 2012-06-27
Enter value for customer_id: 1004
Enter value for salesman_id: 5002
old 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no',
new 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('70012','25

1 row created.

SQL> /
Enter value for ord_no: 70011
Enter value for purch_amt: 75.29
Enter value for ord_date: 2012-08-17
Enter value for customer_id: 1003
Enter value for salesman_id: 5001
old 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no',
new 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('70011','75

1 row created.

```

```
SQL> insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no','&purch_amt','&ord_date','&customer_id','&salesman_id');
Enter value for ord_no: 70013
Enter value for purch_amt: 3045.6
Enter value for ord_date: 2012-04-25
Enter value for customer_id: 1005
Enter value for salesman_id: 5006
old 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('&ord_no','
new 1: insert into ordertable(ord_no,purch_amt,ord_date,customer_id,salesman_id)values('70013','30
1 row created.
```

```
SQL> select * from ordertable;
```

ORD_NO	PURCH_AMT	ORD_DATE	CUSTOMER_ID	SALESMAN_ID
70001	150.5	2012-10-05	1008	5004
70009	270.65	2012-09-10	1003	5001
70002	65.26	2012-10-05	1007	5005
70004	110.5	2012-08-17	1005	5006
70007	948.5	2012-09-10	1003	5001
70005	2400.6	2012-07-27	1006	5003
70008	5760	2012-09-10	1001	5002
70010	1983.43	2012-10-10	1002	5005
70003	2480.4	2012-10-10	1007	5005
70012	250.45	2012-06-27	1004	5002
70011	75.29	2012-08-17	1003	5001

ORD_NO	PURCH_AMT	ORD_DATE	CUSTOMER_ID	SALESMAN_ID
70013	3045.6	2012-04-25	1005	5006

12 rows selected.

### 1. write a SQL query to find all salespeople and customers located in the city of London.

```
SQL> select salesman_id,name from sale where city='london' union select customer_id,cust_name from customertable where city='london';
```

SALESMAN_ID	NAME
1008	jungkook
5004	ross

### 2. write a SQL query to find distinct salespeople and their cities. Return salesperson ID and city

```
SQL> select salesman_id, city from customertable union select salesman_id, city from sale;
```

SALESMAN_ID	CITY
5001	new york
5001	spain
5002	california
5002	korea
5003	moscow
5003	paris
5004	london
5005	paris
5005	russia
5005	tokyo
5006	seoul

11 rows selected.

### 3. write a SQL query to find all those salespeople and customers who are involved in the inventory management system. Return salesperson ID, customer ID.

```
SQL> select salesman_id, customer_id from customertable UNION select salesman_id, customer_id from ordertable;
```

SALESMAN_ID	CUSTOMER_ID
5001	1003
5002	1001
5002	1004
5003	1006
5004	1008
5005	1002
5005	1007
5006	1005

8 rows selected.

4. write a SQL query to find the salespersons who generated the largest and smallest orders on each date. Return salesperson ID, name, order no., highest on/lowest on, order date

```
SQL> SELECT a.salesman_id, name, ord_no, 'highest on', ord_date
2 FROM sale a, ordertable b
3 WHERE a.salesman_id =b.salesman_id
4 AND b.purch_amt=
5 (SELECT MAX (purch_amt)
6 FROM ordertable c
7 WHERE c.ord_date = b.ord_date)
8 UNION
9 (SELECT a.salesman_id, name, ord_no, 'lowest on', ord_date
10 FROM sale a, ordertable b
11 WHERE a.salesman_id =b.salesman_id
12 AND b.purch_amt=
13 (SELECT MIN (purch_amt)
14 FROM ordertable c
15 WHERE c.ord_date = b.ord_date));
```

SALESMAN_ID	NAME	ORD_NO	'HIGHESTON	ORD_DATE
5001	chandler	70007	highest on	2012-09-10
5001	chandler	70009	lowest on	2012-09-10
5001	chandler	70011	highest on	2012-08-17
5002	joey	70012	highest on	2012-06-27
5002	joey	70012	lowest on	2012-06-27
5003	monica	70005	highest on	2012-07-27
5003	monica	70005	lowest on	2012-07-27
5004	ross	70001	lowest on	2012-10-05
5005	rachel	70002	highest on	2012-10-05
5005	rachel	70003	highest on	2012-10-10
5005	rachel	70010	lowest on	2012-10-10

SALESMAN_ID	NAME	ORD_NO	'HIGHESTON	ORD_DATE
5006	phoebe	70004	lowest on	2012-08-17
5006	phoebe	70013	highest on	2012-04-25
5006	phoebe	70013	lowest on	2012-04-25

14 rows selected.

5. write a SQL query to find the salespeople who generated the largest and smallest orders on each date. Sort the result-set on third field. Return salesperson ID, name, order no., highest on/lowest on, order date

```

SQL> SELECT a.salesman_id, name, ord_no, 'highest on', ord_date
2  FROM sale a, ordertable b
3  WHERE a.salesman_id =b.salesman_id
4  AND b.purch_amt=
5  (SELECT MAX (purch_amt)
6   FROM ordertable c
7   WHERE c.ord_date = b.ord_date)
8  UNION
9  (SELECT a.salesman_id, name, ord_no, 'lowest on', ord_date
10 FROM sale a, ordertable b
11 WHERE a.salesman_id =b.salesman_id
12 AND b.purch_amt=
13 (SELECT MIN (purch_amt)
14  FROM ordertable c
15  WHERE c.ord_date = b.ord_date))
16 ORDER BY 3;

```

SALESMAN_ID	NAME	ORD_NO	'HIGHESTON	ORD_DATE
5004	ross	70001	lowest on	2012-10-05
5005	rachel	70002	highest on	2012-10-05
5005	rachel	70003	highest on	2012-10-10
5006	phoebe	70004	lowest on	2012-08-17
5003	monica	70005	highest on	2012-07-27
5003	monica	70005	lowest on	2012-07-27
5001	chandler	70007	highest on	2012-09-10
5001	chandler	70009	lowest on	2012-09-10
5005	rachel	70010	lowest on	2012-10-10
5001	chandler	70011	highest on	2012-08-17
5002	joey	70012	highest on	2012-06-27

  

SALESMAN_ID	NAME	ORD_NO	'HIGHESTON	ORD_DATE
5002	joey	70012	lowest on	2012-06-27
5006	phoebe	70013	highest on	2012-04-25
5006	phoebe	70013	lowest on	2012-04-25

14 rows selected.