

WEEK-3 DBMS LAB

Consider the following relations for an Order Processing database application in a company.

CUSTOMER (CUST #: int, cname: String, city: String)

ORDER (order #: int, odate: date, cust #: int, ord-Amt: int)

ITEM (item #: int, unit-price: int)

ORDER-ITEM (order #: int, item #: int, qty: int)

WAREHOUSE (warehouse #: int, city: String)

SHIPMENT (order #: int, warehouse #: int, ship-date: date)

i) Create the above tables by properly specifying the primary keys and the foreign keys

ii) Enter at least five tuples for each relation.

iii) Produce a listing: CUSTNAME, #oforders, AVG_ORDER_AMT, where the middle column is the total numbers of orders by the customer and the last column is the average order amount for that customer.

iv) List the order# for orders that were shipped from all warehouses that the company has in a specific city.

v) Demonstrate how you delete item# 10 from the ITEM table and make that field null in the ORDER_ITEM table.

OUTPUT:

i) Create the above tables by properly specifying the primary keys and the foreign keys and the foreign keys.

ii) Enter at least five tuples for each relation.

Query 1 Insurance_DB ORDERS_DB bank_db student_db

Limit to 1000 rows

```
71 (119,7,'30-APR-05'),
72 (120,6,'21-DEC-05');
73
74 • SELECT*FROM CUSTOMER;
75 • SELECT*FROM ORDERS;
76 • SELECT*FROM ITEM;
77 • SELECT*FROM orders_item;
78 • SELECT*FROM shipment;
79 • SELECT*FROM warehouse;
80
81 /*iii) Produce a listing: CUSTNAME, #oforders, AVG_ORDER_AMT, where the middle column is the total
82 numbers of orders by the customer and the last column is the average order amount for that customer */
```

Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content:

	CUST_ID	cname	city
▶	771	PUSHPA K	BANGALORE
	772	SUMAN	MUMBAI
	773	SOURAV	CALICUT
	774	LAILA	HYDERABAD
	775	FAIZAL	BANGALORE
*	NULL	NULL	NULL

Query 1 Insurance_DB ORDERS_DB bank_db student_db

Limit to 1000 rows

```
71 (119,7,'30-APR-05'),
72 (120,6,'21-DEC-05');
73
74 • SELECT*FROM CUSTOMER;
75 • SELECT*FROM ORDERS;
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81 /*iii) Produce a listing: CUSTNAME, #oforders, AVG_ORDER_AMT, where the middle column is the total
82 numbers of orders by the customer and the last column is the average order amount for that customer */
```

Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content:

	ORDER_ID	odate	CUST_ID	order_amt
▶	111	22-JAN-02	771	18000
	112	30-JUL-02	774	6000
	113	03-APR-03	775	9000
	114	03-NOV-03	775	29000
	115	10-DEC-03	773	29000
	116	19-AUG-04	772	56000
	117	10-SEP-04	771	20000
	118	20-NOV-04	775	29000

ORDERS 2 x

Query 1 Insurance_DB ORDERS_DB bank_db student_db

Limit to 1000 rows

```

71      (119,7,'30-APR-05'),
72      (120,6,'21-DEC-05');
73
74 •     SELECT*FROM CUSTOMER;
75 •     SELECT*FROM ORDERS;
76 •     SELECT*FROM ITEM;
77 •     SELECT*FROM orders_item;
78 •     SELECT*FROM shipment;
79 •     SELECT*FROM warehouse;
80

```

Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content:

	ITEM_ID	PRICE
▶	5001	503
	5002	750
	5003	150
	5004	600
*	NULL	NULL

Query 1 Insurance_DB ORDERS_DB bank_db student_db

Limit to 1000 rows

```

71      (119,7,'30-APR-05'),
72      (120,6,'21-DEC-05');
73
74 •     SELECT*FROM CUSTOMER;
75 •     SELECT*FROM ORDERS;
76 •     SELECT*FROM ITEM;
77 •     SELECT*FROM orders_item;
78 •     SELECT*FROM shipment;
79 •     SELECT*FROM warehouse;

```

Result Grid Filter Rows: Export: Wrap Cell Content:

	ORDER_ID	ITEM_ID	QTY
▶	111	5001	50
	112	5003	20
	113	5002	50
	114	NULL	60
	115	5004	90
	116	5001	10
	117	5003	80
	118	NULL	50
	119	5002	10
	120	5004	45

Query 1 Insurance_DB ORDERS_DB bank_db student_db

Limit to 1000 rows

```

74 • SELECT*FROM CUSTOMER;
75 • SELECT*FROM ORDERS;
76 • SELECT*FROM ITEM;
77 • SELECT*FROM orders_item;
78 • SELECT*FROM shipment;
79 • SELECT*FROM warehouse;
80
81 /*iii) Produce a listing: CUSTNAME, #oforders, AVG_ORDER_AMT, where the middle column is the total
82 numbers of orders by the customer and the last column is the average order amount for that customer.*/

```

Result Grid Filter Rows: Export: Wrap Cell Content:

	ORDER_ID	warehouse	ship_date
▶	111	1	10-FEB-02
	112	5	10-SEP-02
	113	8	10-FEB-03
	114	3	10-DEC-03
	115	9	19-JAN-04
	116	1	20-SEP-04
	117	5	10-SEP-04
	118	7	30-NOV-04
	119	7	30-APR-05
	120	6	21-DEC-05

Query 1 Insurance_DB ORDERS_DB bank_db student_db

Limit to 1000 rows

```

74 • SELECT*FROM CUSTOMER;
75 • SELECT*FROM ORDERS;
76 • SELECT*FROM ITEM;
77 • SELECT*FROM orders_item;
78 • SELECT*FROM shipment;
79 • SELECT*FROM warehouse;
80
81
82

```

Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content:

	warehouse	city
▶	1	DELHI
	2	BOMBAY
	3	CHENNAI
	4	BANGALORE
	5	BANGALORE
	6	DELHI
	7	BOMBAY
	8	CHENNAI
	9	DELHI
	10	BANGALORE
*	NULL	NULL

warehouse 6

iii) Produce a listing: CUSTNAME, #oforders, AVG_ORDER_AMT, where the middle column is the total numbers of orders by the customer and the last column is the average order amount for that customer.

Query 1 Insurance_DB **ORDERS_DB** bank_db student_db

Limit to 1000 rows

```

78 •      SELECT*FROM shipment;
79 •      SELECT*FROM warehouse;
80
81 •      /*iii) Produce a listing: CUSTNAME, #oforders, AVG_ORDER_AMT, where the middle column is the total
82 •      numbers of orders by the customer and the last column is the average order amount for that customer.*/
83 •      SELECT customer.cname AS CUSTNAME,COUNT(*) AS NO_OF_ORDERS,AVG(order_amt) AS AVG_ORDER_AMT FROM customer,orders WHERE customer.CU

```

Result Grid Filter Rows: Export: Wrap Cell Content:

	CUSTNAME	NO_OF_ORDERS	AVG_ORDER_AMT
▶	PUSHPA K	2	19000.0000
	LAILA	2	17500.0000
	FAIZAL	4	24000.0000
	SOURAV	1	29000.0000
	SUMAN	1	56000.0000

iv) List the order# for orders that were shipped from all warehouses that the company has in a specific city.

Query 1 Insurance_DB ORDERS_DB x bank_db student_db

Limit to 1000 rows

```
80
81 /*iii) Produce a listing: CUSTNAME, #oforders, AVG_ORDER_AMT, where the middle column is the total
82 numbers of orders by the customer and the last column is the average order amount for that customer.*/
83 • SELECT customer.cname AS CUSTNAME,COUNT(*) AS NO_OF_ORDERS,AVG(order_amt) AS AVG_ORDER_AMT FROM customer,orders WHERE customer.CUST_ID
84 /*iv) List the order# for orders that were shipped from all warehouses that the company has in a specific city.*/
85 • SELECT ORDER_ID,city AS ALL_ORDERS_FROM_A_CITY FROM shipment LEFT JOIN warehouse ON shipment.warehouse=warehouse.warehouse GROUP BY OR
```

Result Grid

Filter Rows: Export: Wrap Cell Content:

ORDER_ID	ALL_ORDERS_FROM_A_CITY
112	BANGALORE
117	BANGALORE
118	BOMBAY
119	BOMBAY
113	CHENNAI
114	CHENNAI
111	DELHI
115	DELHI
116	DELHI
120	DELHI

v) Demonstrate how you delete item# 10 from the ITEM table and make that field null in the ORDER_ITEM table.

Query 1 Insurance_DB ORDERS_DB x bank_db student_db

Limit to 1000 rows

```
85 • SELECT ORDER_ID,city AS ALL_ORDERS_FROM_A_CITY FROM shipment LEFT JOIN warehouse ON shipment.warehouse=warehouse.w
86 /* v) Demonstrate how you delete item# 10 from the ITEM table and make that field null in the ORDER_ITEM
87 table.*/
88 • DELETE FROM ITEM WHERE ITEM_ID=5005;
89 • SELECT*FROM ITEM;
90 • SELECT*FROM orders_item;
```

Result Grid Filter Rows: Export: Wrap Cell Content:

	ORDER_ID	ITEM_ID	QTY
▶	111	5001	50
	112	5003	20
	113	5002	50
	114	NULL	60
	115	5004	90
	116	5001	10
	117	5003	80
	118	NULL	50
	119	5002	10
	120	5004	45

*******LAB 3 ENDS*******