

1)

Code:

```
CREATE DATABASE sales;
```

```
USE sales;
```

```
CREATE TABLE purchase (
```

```
    ord_no INT,
```

```
    purch_amt DOUBLE,
```

```
    ord_date DATE,
```

```
    customer_id INT,
```

```
    salesman_id INT
```

```
);
```

```
INSERT INTO purchase (ord_no,purch_amt,ord_date,customer_id,salesman_id)
```

```
VALUES
```

```
    ( 70001,150.5, "2012-10-05",3005,5002),
```

```
    (70009,270.65, "2012-09-10",3001,5005),
```

```
    (70002,65.26, "2012-10-05",3002,5001),
```

```
    (70004,110.5, "2012-08-17",3009,5003),
```

```
    (70007,948.5, "2012-09-10",3005,5002),
```

```
    (70005,2400.6, "2012-07-27",3007,5001),
```

```
    (70008, 5760, "2012-09-10",3002,5001),
```

```
    (70010,1983.43,"2012-10-10",3004,5006),
```

```
    (70003,2480.4, "2012-10-10",3009,5003),
```

```
    (70012,250.45, "2012-06-27",3008,5002),
```

```
    (70011,75.29, "2012-08-17",3003,5007),
```

```
    (70013,3045.6, "2012-04-25",3002,5001)
```

```
;
```


```
DELETE FROM purchase;
```

```
DROP TABLE purchase;
```

```
DROP DATABASE sales;
```


Tables:

➔ Purchases:


<input checked="" type="checkbox"/>		ord_no int(11)	purch_amt double	ord_date date	customer_id int(11)	salesman_id int(11)
		Filter	Filter	Filter	Filter	Filter
	1	70001	150.5	2012-10-05	3005	5002
	2	70009	270.65	2012-09-10	3001	5005
	3	70002	65.26	2012-10-05	3002	5001
	4	70004	110.5	2012-08-17	3009	5003
	5	70007	948.5	2012-09-10	3005	5002
	6	70005	2400.6	2012-07-27	3007	5001
	7	70008	5760	2012-09-10	3002	5001
	8	70010	1983.43	2012-10-10	3004	5006
	9	70003	2480.4	2012-10-10	3009	5003
	10	70012	250.45	2012-06-27	3008	5002
	11	70011	75.29	2012-08-17	3003	5007
	12	70013	3045.6	2012-04-25	3002	5001

Queries/Outputs:


➔ SELECT MIN(purch\_amt) FROM purchase;

<input checked="" type="checkbox"/>		MIN(purch_amt) int(11)
		Filter
	1	65.26


➔ SELECT MIN(purch\_amt) FROM purchase;

<input checked="" type="checkbox"/>		MAX(purch_amt) int(11)	⬆⬇⬆
		Filter	
	1	5760	


→ SELECT MIN(purch\_amt) FROM purchase;

<input checked="" type="checkbox"/>		SUM(purch_amt) int(11)	⬆⬇⬆
		Filter	
	1	17541.18	

→ SELECT AVG(purch\_amt) FROM purchase;

<input checked="" type="checkbox"/>		AVG(purch_amt) int(11)	⬆⬇⬆
		Filter	
	1	1461.765	

→ SELECT COUNT(DISTINCT customer\_id) FROM purchase;

<input checked="" type="checkbox"/>		COUNT(DISTINCT cust int(11)	⬆⬇⬆
		Filter	
	1	8	

→ ALTER TABLE purchase ADD warranty date ;  
UPDATE purchase SET warranty = DATE\_ADD(ord\_date , INTERVAL 6 MONTH);  
SELECT \* FROM purchase;

EXECUTE SUCCESS:

ALTER TABLE purchase ADD warranty date ; UPDATE purchase SET warranty =  
DATE\_ADD(ord\_date , INTERVAL 6 MONTH); SELECT \* FROM purchase;

		ord_no int(11)	purch_amt double	ord_date date	customer_id int(11)	salesman_id int(11)	warranty date
		Filter	Filter	Filter	Filter	Filter	Filter
	1	70001	150.5	2012-10-05	3005	5002	2013-04-05
	2	70009	270.65	2012-09-10	3001	5005	2013-03-10
	3	70002	65.26	2012-10-05	3002	5001	2013-04-05
	4	70004	110.5	2012-08-17	3009	5003	2013-02-17
	5	70007	948.5	2012-09-10	3005	5002	2013-03-10
	6	70005	2400.6	2012-07-27	3007	5001	2013-01-27
	7	70008	5760	2012-09-10	3002	5001	2013-03-10
	8	70010	1983.43	2012-10-10	3004	5006	2013-04-10
	9	70003	2480.4	2012-10-10	3009	5003	2013-04-10
	10	70012	250.45	2012-06-27	3008	5002	2012-12-27
	11	70011	75.29	2012-08-17	3003	5007	2013-02-17
	12	70013	3045.6	2012-04-25	3002	5001	2012-10-25

➔ (SELECT \* FROM purchase ORDER BY ord\_date ASC LIMIT 1)  
 UNION (SELECT \*FROM purchase ORDER BY ord\_date DESC LIMIT 1  
 ;

		ord_no int(11)	purch_amt double	ord_date date	customer_id int(11)	salesman_id int(11)	warranty date
		Filter	Filter	Filter	Filter	Filter	Filter
	1	70013	3045.6	2012-04-25	3002	5001	2012-10-25
	2	70010	1983.43	2012-10-10	3004	5006	2013-04-10

➔ SELECT DATE\_ADD(ord\_date, INTERVAL 1 DAY) AS NextDay FROM purchase ;

next_day int(11)		
		Filter
	1	2012-10-06
	2	2012-09-11
	3	2012-10-06
	4	2012-08-18
	5	2012-09-11
	6	2012-07-28
	7	2012-09-11
	8	2012-10-11
	9	2012-10-11
	10	2012-06-28
	11	2012-08-18
	12	2012-04-26

→ (SELECT FLOOR(purch\_amt) FROM purchase ORDER BY purch\_amt ASC LIMIT 1)  
 UNION (SELECT CEIL(purch\_amt) FROM purchase ORDER BY purch\_amt DESC LIMIT 1)  
 ;

FLOOR(purch_amt) int(11)		
		Filter
	1	65
	2	5760

→ `SELECT ROUND(purch_amt, 1) FROM purchase;`



The screenshot shows a database interface with a query bar at the top containing the SQL statement `ROUND(purch_amt, 1)`. Below the query bar is a table with 12 rows. The first column contains row numbers 1 through 12, and the second column contains the rounded purchase amounts. The table has a dark theme with green text for the row numbers.

	Filter
1	150.5
2	270.6
3	65.3
4	110.5
5	948.5
6	2400.6
7	5760.0
8	1983.4
9	2480.4
10	250.4
11	75.3
12	3045.6

2)

Code:

```
CREATE DATABASE Customer;
```

```
USE Customer;
```

```
CREATE TABLE CustInfo (
```

```
    CustId VARCHAR(5) PRIMARY KEY,
```

```
    CustName VARCHAR(25),
```

```
    CustAdd VARCHAR(50),
```

```

        Phone BIGINT(10),
        Email VARCHAR(25),
        CHECK (CustId like "C%"),
        CHECK (Email like "%@%")
    );

```

```

INSERT INTO CustInfo

```

```

VALUES

```

```

    ("C0001", "AmitSaha", "L-10, Pitampura", 4564587852, "amitsaha2@gmail.com"),
    ("C0002", "Rehnuma", "J-12, SAKET", 5527688761, "rehnuma@hotmail.com"),
    ("C0003", "CharviNayyar", "10/9, FF, Rohini", 6811635425, "charvi123@yahoo.com"),
    ("C0004", "Gurpreet", "A-10/2, SF, MayurVihar", 3511056125, "gur_singh@yahoo.com")
;

```

```

DELETE FROM CustInfo;

```

```

DROP TABLE CustInfo;

```

```

DROP DATABASE Customer;

```

Tables:

➔ Customer info

		* CustId varchar(5)	CustName varchar(25)	CustAdd varchar(50)	Phone bigint(10)	Email varchar(25)
		Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/>	1	C0001	AmitSaha	L-10, Pitampura	4564587852	amitsaha2@gmail.com
<input type="checkbox"/>	2	C0002	Rehnuma	J-12, SAKET	5527688761	rehnuma@hotmail.com
<input type="checkbox"/>	3	C0003	CharviNayyar	10/9, FF, Rohini	6811635425	charvi123@yahoo.com
<input type="checkbox"/>	4	C0004	Gurpreet	A-10/2, SF, MayurVihar	3511056125	gur_singh@yahoo.com

Queries/Outputs:

➔ SELECT LOWER(CustName), UPPER>Email) FROM CustInfo;

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LOWER(CustName)	UPPER(Email)
		Filter	Filter
	1	amitsaha	AMITSAHA2@GMAIL.COM
	2	rehnuma	REHNUMA@HOTMAIL.CO
	3	charvinayyar	CHARVI123@YAHOO.COM
	4	gurpreet	GUR_SINGH@YAHOO.CO

→ SELECT TRIM(TRAILING '.com' FROM Email) AS Trimmed\_Email FROM CustInfo;

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Trimmed_Email
		Filter
	1	amitsaha2@gmail
	2	rehnuma@hotmail
	3	charvi123@yahoo
	4	gur_singh@yahoo

→ SELECT CustName, LENGTH(CustName) AS Length\_CustName FROM CustInfo;

<input type="checkbox"/>	<input checked="" type="checkbox"/>	* CustName varchar(5)	Length_CustName varchar(25)
		Filter	Filter
<input type="checkbox"/>	1	AmitSaha	8
<input type="checkbox"/>	2	Rehnuma	7
<input type="checkbox"/>	3	CharviNayyar	12
<input type="checkbox"/>	4	Gurpreet	8


→ SELECT CONCAT(CustId, CustName) AS IdName,  
POSITION('A' in CustName) AS PosA



FROM CustInfo;

✓	Q	IdName	PosA
		Filter	Filter
	1	C0001AmitSaha	1
	2	C0002Rehnuma	7
	3	C0003CharviNayyar	3
	4	C0004Gurpreet	0

→ SELECT \* FROM CustInfo WHERE CustName LIKE '%a';

<input type="checkbox"/>		* CustId varchar(5)	CustName varchar(25)	CustAdd varchar(50)	Phone bigint(10)	Email varchar(25)
		Filter	Filter	Filter	Filter	Filter
<input type="checkbox"/>	1	C0001	AmitSaha	L-10, Pitampura	4564587852	amitsaha2@gmail.com
<input type="checkbox"/>	2	C0002	Rehnuma	J-12, SAKET	5527688761	rehnuma@hotmail.com

→ SELECT SUBSTR(Email, 2, 3) AS d\_Email FROM CustInfo;

✓	Q	d_Email
		Filter
	1	mit
	2	ehn
	3	har
	4	ur_

→ SELECT SUBSTRING(CustAdd, 1, 20) AS d\_CustAdd FROM CustInfo;

✓	Q	d_CustAdd
		Filter
	1	L-10, Pitampura
	2	J-12, SAKET
	3	10/9, FF, Rohini
	4	A-10/2, SF, MayurVih