```
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:

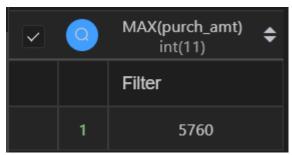
✓ V	0	ord_no int(11) ◆	purch_amt +	ord_date	customer_id \$	salesman_id 💠
		Filter	Filter	Filter	Filter	Filter
	1	70001	150.5	2012-10-05	3005	5002
	2	70009	270.65	2012-09-10	3001	5005
	3	70002	65.26	2012-10-05	3002	5001
	4	70004	110.5	2012-08-17	3009	5003
	5	70007	948.5	2012-09-10	3005	5002
	6	70005	2400.6	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:

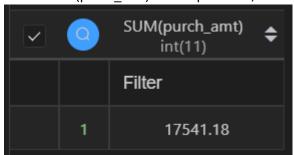
→ SELECT MIN(purch\_amt) FROM purchase;

~	0	MIN(purch_amt) int(11)	<b>‡</b>
		Filter	
	1	65.26	

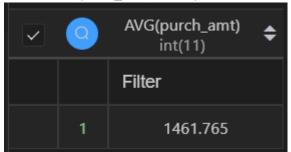
→ SELECT MIN(purch\_amt) FROM purchase;



→ SELECT MIN(purch\_amt) FROM purchase;



→ SELECT AVG(purch\_amt) FROM purchase;



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



→ 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;

~	0	ord_no int(11) ◆	purch_amt double <b>♦</b>	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

~	0	ord_no int(11) ◆	purch_amt double	ord_date <b>♦</b>	customer_id •	salesman_id int(11)	warranty date <b>♦</b>
		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;



→ (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)

;

~	0	FLOOR(purch_amt) int(11)	<b>\$</b>
		Filter	
	1	65	
	2	5760	

## → SELECT ROUND(purch\_amt, 1) FROM purchase;

~	( <u>Q</u>	ROUND(purch_amt, 1) \$
		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

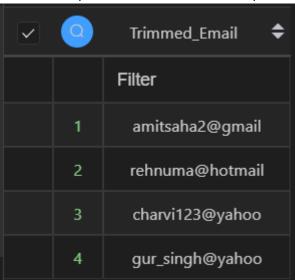
0	* CustId varchar(5)	CustName varchar(25) ◆	CustAdd varchar(50) <b>♦</b>	Phone bigint(10) ◆	Email varchar(25)
	Filter	Filter	Filter	Filter	Filter
1	C0001	AmitSaha	L-10, Pitampura	4564587852	amitsaha 2@gmail.com
2	C0002	Rehnuma	J-12, SAKET	5527688761	rehnuma@hotmail.com
3	C0003	CharviNayyar	10/9, FF,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

## Queries/Outputs:

→ SELECT LOWER(CustName), UPPER(Email) FROM CustInfo;

~	0	LOWER(CustName) 💠	UPPER(Email) <b>♦</b>
		Filter	Filter
	1	amitsaha	amitsaha2@gmail.con
	2	rehnuma	REHNUMA@HOTMAIL.CC
	3	charvinayyar	CHARVI123@YAHOO.CON
	4	gurpreet	GUR_SINGH@YAHOO.COI

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



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

0	* CustName varchar(5)	Length_CustName
	Filter	Filter
1	AmitSaha	8
2	Rehnuma	7
3	CharviNayyar	12
4	Gurpreet	8

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

### FROM CustInfo;

~	0	IdName 💠	PosA 💠
		Filter	Filter
	1	C0001AmitSaha	1
	2	C0002Rehnuma	7
	3	C0003CharviNayyar	3
	4	C0004Gurpreet	0

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

0	* CustId varchar(5)	CustName varchar(25) ◆	CustAdd varchar(50)	Phone bigint(10)	Email varchar(25) ◆
	Filter	Filter	Filter	Filter	Filter
1	C0001	AmitSaha	L-10, Pitampura	4564587852	amitsaha2@gmail.com
2	C0002	Rehnuma	J-12, SAKET	5527688761	rehnuma@hotmail.com

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



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

