

Paper 1

```
DROP TABLE IF EXISTS `customers`;
```

```
create TABLE customers (
customer_Id int(11) NOT NULL,
First_Name varchar(50) NOT NULL,
Last_Name varchar(50) NOT NULL,
phone varchar(50) NOT NULL,
creditLimit decimal(10,2) DEFAULT NULL,
PRIMARY KEY (`customer_Id`)
);
insert into customers(customer_Id,First_Name,Last_Name,phone,creditLimit) values
(103,'Atelier','Schmitt','08-78966578','21000.00'),
(112,'Signal','King','7025551838','71800.00'),
(114,'Ferguson','Peter','03-9520 4555','117300.00'),
(119,'Labrune','Janine','40.67.8555','118200.00'),
(121,'Bergulfsen','Jonas ','07-989555','81700.00'),
(124,'Nelson','Susan','4155551450','210500.00'),
(125,'Piestrzeniewicz','Zbyszek ','(26) 642-7555','0.00'),
(128,'Keitel','Roland','+49 6966 90 2555','59700.00'),
(129,'Murphy','Julie','6505555787','64600.00'),
(131,'Lee','Kwai','2125557818','114900.00'),
(141,'Freyre','Diego ','(91) 555 94 44','227600.00'),
(144,'Berglund','Christina','0921-12 3555','53100.00'),
(145,'Petersen','Jytte ','31 12 3555','83400.00'),
(146,'Saveley','Mary','78.32.5555','123900.00'),
(148,'Eric','Jacob','+65 2217555','103800.00'),
(151,'Young','Jeff','2125557413','138500.00');
mysql> select * from customers;
```

customer_Id	First_Name	Last_Name	phone	creditLimit
103	Atelier	Schmitt	08-78966578	21000.00
112	Signal	King	7025551838	71800.00
114	Ferguson	Peter	03-9520 4555	117300.00
119	Labrune	Janine	40.67.8555	118200.00
121	Bergulfsen	Jonas	07-989555	81700.00
124	Nelson	Susan	4155551450	210500.00
125	Piestrzeniewicz	Zbyszek	(26) 642-7555	0.00
128	Keitel	Roland	+49 6966 90 2555	59700.00
129	Murphy	Julie	6505555787	64600.00
131	Lee	Kwai	2125557818	114900.00
141	Freyre	Diego	(91) 555 94 44	227600.00
144	Berglund	Christina	0921-12 3555	53100.00
145	Petersen	Jytte	31 12 3555	83400.00
146	Saveley	Mary	78.32.5555	123900.00
148	Eric	Jacob	+65 2217555	103800.00
151	Young	Jeff	2125557413	138500.00

```
DROP TABLE IF EXISTS `orders`;
```

```
CREATE TABLE orders(
order_Id int(11) NOT NULL,
order_Date date NOT NULL,
shipped_Date date DEFAULT NULL,
Deliver varchar(15) NOT NULL,
customer_Id int(11) NOT NULL,
PRIMARY KEY (order_Id),
FOREIGN KEY (customer_Id) REFERENCES customers(customer_Id) on delete cascade
);
insert into orders(order_Id,order_Date,shipped_Date,Deliver,customer_Id) values
(10100,'2003-01-06','2003-01-13','Shipped',114),
(10101,'2003-01-09','2003-01-18','Shipped',125),
```

```
(10102,'2003-01-10','2003-01-18','Shipped',129),
(10103,'2003-01-29','2003-02-07','Shipped',121),
(10104,'2003-01-31','2003-02-09','Shipped',141),
(10105,'2003-02-11','2003-02-21','Shipped',145);
```

```
mysql> select * from orders;
```

order_Id	order_Date	shipped_Date	Deliver	customer_Id
10100	2003-01-06	2003-01-13	Shipped	114
10101	2003-01-09	2003-01-18	Shipped	125
10102	2003-01-10	2003-01-18	Shipped	129
10103	2003-01-29	2003-02-07	Shipped	121
10104	2003-01-31	2003-02-09	Shipped	141
10105	2003-02-11	2003-02-21	Shipped	145

1. Write a Query to add a column package_stat to the table orders.

Answer: alter table orders Add package_stat varchar(20);

```
mysql> select * from orders;
```

order_Id	order_Date	shipped_Date	Deliver	customer_Id	package_stat
10100	2003-01-06	2003-01-13	Shipped	114	NULL
10101	2003-01-09	2003-01-18	Shipped	125	NULL
10102	2003-01-10	2003-01-18	Shipped	129	NULL
10103	2003-01-29	2003-02-07	Shipped	121	NULL
10104	2003-01-31	2003-02-09	Shipped	141	NULL
10105	2003-02-11	2003-02-21	Shipped	145	NULL

2. Write a Query to change the package_stat column of orders table with 'not available' for all orders.

```
mysql> update orders set package_stat='not available';
```

```
mysql> select * from orders;
```

order_Id	order_Date	shipped_Date	Deliver	customer_Id	package_stat
10100	2003-01-06	2003-01-13	Shipped	114	not available
10101	2003-01-09	2003-01-18	Shipped	125	not available
10102	2003-01-10	2003-01-18	Shipped	129	not available
10103	2003-01-29	2003-02-07	Shipped	121	not available
10104	2003-01-31	2003-02-09	Shipped	141	not available
10105	2003-02-11	2003-02-21	Shipped	145	not available

3. Write a Query to delete a row from customers table where credit_limit is 0.00

Answer: DELETE FROM Customers WHERE creditlimit=0.00; (key problem)

```
=====
===
```

Write SELECT statements to achieve the following:

1. Write a Query to display the first_name with the occurrence of 'el' in the customers tables.

```
mysql> SELECT first_name FROM customers WHERE first_name LIKE '%el%';
```

first_name

Atelier
Nelson
Keitel
Saveley

2. Write a Query to prepare a list with customer name ,customer_id ,order_id for the customers whose delivery status is shipped.

```
select first_name,last_name,o.customer_id from customers as c,orders as o where
o.customer_id=c.customer_id and Deliver='shipped';
```

first_name	last_name	customer_id
Ferguson	Peter	114
Piestrzeniewicz	Zbyszek	125
Murphy	Julie	129
Bergulfsen	Jonas	121
Freyre	Diego	141
Petersen	Jytte	145

```
mysql> select first_name,last_name,orders.customer_id from customers,orders where
orders.customer_id=customers.Customer_id and Deliver='shipped';
```

first_name	last_name	customer_id
Ferguson	Peter	114
Piestrzeniewicz	Zbyszek	125
Murphy	Julie	129
Bergulfsen	Jonas	121
Freyre	Diego	141
Petersen	Jytte	145

3. Write a Query to get the number of customers with the creditLimit greater than 50000.

```
mysql> select count(creditlimit) from customers where creditlimit>50000;
```

count(creditlimit)
14

4. Write a Query to display the customer_id, name (first name and last name), order_id and deliver for all customers.

```
select orders.customer_id , concat (concat(First_name, ' '), last_name) as Name ,
orders.order_id , orders.Deliver from customers , orders
where orders.customer_Id = customers.customer_Id;
```

customer_id	Name	order_id	Deliver
114	Ferguson Peter	10100	Shipped
125	Piestrzeniewicz Zbyszek	10101	Shipped
129	Murphy Julie	10102	Shipped
121	Bergulfsen Jonas	10103	Shipped
141	Freyre Diego	10104	Shipped
145	Petersen Jytte	10105	Shipped

5. Write a Query to customer name in order of creditLimit smallest to highest.

```
mysql> select first_name,last_name,creditLimit from customers order by creditLimit;
```

first_name	last_name	creditLimit
Piestrzeniewicz	Zbyszek	0.00
Atelier	Schmitt	21000.00
Berglund	Christina	53100.00
Keitel	Roland	59700.00
Murphy	Julie	64600.00
Signal	King	71800.00
Bergulfsen	Jonas	81700.00
Petersen	Jytte	83400.00
Eric	Jacob	103800.00
Lee	Kwai	114900.00
Ferguson	Peter	117300.00
Labrune	Janine	118200.00
Saveley	Mary	123900.00
Young	Jeff	138500.00
Nelson	Susan	210500.00
Freyre	Diego	227600.00

6. Write a stored procedure by name order_day. The procedure should show the customer_id and the day on which he had made the order.

Answer:

```
drop procedure if exists order_day;
```

```
drop table if exists temp;
```

```
Create table temp
```

```
(
customer_id int,
order_date date
);
```

```
/* ..... */
```

```
delimiter //
```

```
create procedure order_day(cust int)
```

```
begin
```

```
declare order_d date;
```

```
declare cid date;
```

```
select order_date into cid from orders where customer_id=cust;
```

```
insert into temp values(cust ,cid);
```

```
end; //
```

```
delimiter ;
```

```
/* ..... */
```

```
call order_day(114);
```

```
select * from temp;
```

```
mysql> select * from temp;
```

customer_id	order_date
114	2003-01-06

7. Write a stored function by the name of cutomer_search. The stored function should return the maximum creditLimit made by any customer.

```
drop function if exists customer_search;
```

```
delimiter //
```

```
create function customer_search()
```

```
returns int
```

```

deterministic
begin
    declare x int;

    select max(creditLimit) into x from customers;
    return x;
end;
delimiter ;

select customer_search() from dual;

```

Paper 2

```

#####

```

1. Create DEPT table with the following structure:-

```

DEPTNO INT(2)
DNAME VARCHAR (14)
LOC VARCHAR (13)

```

Insert the following rows in DEPT table:-

```

10, ACCOUNTING, NEW YORK
20, RESEARCH, DALLAS
30, SALES, CHICAGO
40, OPERATIONS, BOSTON

```

Answer:

```

drop table if exists dept ;
Create table DEPT(Deptno int,DNAME varchar(25),LOC Varchar(10));
insert into DEPT values(10,'ACCOUNTING','NEW YORK');
insert into DEPT values(20,'RESEARCH','DALLAS');
insert into DEPT values(30,'SALES','CHICAGO');
insert into DEPT values(40,'OPERATIONS','BOSTON');
select * from dept;
mysql> select * from dept;

```

Deptno	DNAME	LOC
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

2. Create EMP table with the following structure:-

```

EMPNO INT(4)
ENAME VARCHAR (10)
JOB VARCHAR (9)
HIREDATE DATE
SAL FLOAT(7,2)
COMM FLOAT(7,2)
DEPTNO INT(2)

```

Insert the following rows in EMP table:-

```

7369, SMITH, CLERK, 17-DEC-80, 800, null, 20
7499, ALLEN, SALESMAN, 20-FEB-81, 1600, 300, 30
7521, WARD, SALESMAN, 22-FEB-81, 1250, 500, 30
7566, JONES, MANAGER, 02-APR-81, 2975, null, 20
7654, MARTIN, SALESMAN, 28-SEP-81, 1250, 1400, null, 30
7698, BLAKE, MANAGER, 01-MAY-81, 2850, null, 30
7782, CLARK, MANAGER, 09-JUN-81, 2450, null, 10

```

```

7788, SCOTT, ANALYST, 09-DEC-82, 3000, null, 20
7839, KING, PRESIDENT, 17-NOV-81, 5000, null, 10
7844, TURNER, SALESMAN, 08-SEP-81, 1500, 0, 30
7876, ADAMS, CLERK, 12-JAN-83, 1100, null, 20
7900, JAMES, CLERK, 03-DEC-81, 950, null, 30
7902, FORD, ANALYST, 03-DEC-81, 3000, null, 20
7934, MILLER, CLERK, 23-JAN-82, 1300, null,

```

Answer:

```

drop table if exists emp;
CREATE table EMP(EMPNO int(4),ENAME varchar(10),JOB varchar(9),HIREDATE date,SAL
float(7,2),COMM float(7,2),DEPTNO int(2));
insert into EMP values(7369, 'SMITH', 'CLERK','1980-12-17', 800, null, 20);
insert into EMP values(7499,'ALLEN','SALESMAN','1981-02-20',1600, 300, 30);
insert into EMP values(7521,'WARDv','LESMAN','1981-02-22', 1250, 500, 30);
insert into EMP values(7566,'JONES', 'MANAGER', '1981-04-02', 2975, null, 20);
insert into EMP values(7654,'MARTIN','SALESMAN','1981-09-28', 1250, 1400, null);
insert into EMP values(7698, 'BLAKE','MANAGER','1981-05-01', 2850, null, 30);
insert into EMP values(7782, 'CLARK', 'MANAGER','1981-06-09', 2450, null, 10);
insert into EMP values(7788, 'SCOTT', 'ANALYST','1982-12-09', 3000, null, 20);
insert into EMP values(7839, 'KING', 'PRESIDENT', '1981-11-17', 5000, null, 10);
insert into EMP values(7844, 'TURNER', 'SALESMAN', '1981-09-08', 1500, 0, 30);
insert into EMP values(7876,'ADAMS', 'CLERK', '1983-01-12', 1100, null, 20);
insert into EMP values(7900, 'JAMES', 'CLERK', '1981-12-03', 95, null, 30);
insert into EMP values(7902, 'FORD', 'ANALYST', '1981-12-03', 3000, null, 20);
insert into EMP values(7934, 'MILLER','CLERK', '1982-01-23', 1300, null, 10);

```

mysql> select * from emp;

EMPNO	ENAME	JOB	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	1980-12-17	800.00	NULL	20
7499	ALLEN	SALESMAN	1981-02-20	1600.00	300.00	30
7521	WARDv	LESMAN	1981-02-22	1250.00	500.00	30
7566	JONES	MANAGER	1981-04-02	2975.00	NULL	20
7654	MARTIN	SALESMAN	1981-09-28	1250.00	1400.00	NULL
7698	BLAKE	MANAGER	1981-05-01	2850.00	NULL	30
7782	CLARK	MANAGER	1981-06-09	2450.00	NULL	10
7788	SCOTT	ANALYST	1982-12-09	3000.00	NULL	20
7839	KING	PRESIDENT	1981-11-17	5000.00	NULL	10
7844	TURNER	SALESMAN	1981-09-08	1500.00	0.00	30
7876	ADAMS	CLERK	1983-01-12	1100.00	NULL	20
7900	JAMES	CLERK	1981-12-03	95.00	NULL	30
7902	FORD	ANALYST	1981-12-03	3000.00	NULL	20
7934	MILLER	CLERK	1982-01-23	1300.00	NULL	10

14 rows in set (0.00 sec)

Write SELECT statements to achieve the following:-

1. Display only the EMPNO and ENAME columns from EMP table.

mysql> select empno,ename from emp;

empno	ename
7369	SMITH
7499	ALLEN
7521	WARDv
7566	JONES
7654	MARTIN
7698	BLAKE
7782	CLARK
7788	SCOTT

7839	KING
7844	TURNER
7876	ADAMS
7900	JAMES
7902	FORD
7934	MILLER

2. Display **all** employees who **are** CLERKs **and** the MANAGERs.

```
mysql> select * from emp where job='Clerk' or job='Manager' order by job;
```

EMPNO	ENAME	JOB	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	1980-12-17	800.00	NULL	20
7876	ADAMS	CLERK	1983-01-12	1100.00	NULL	20
7900	JAMES	CLERK	1981-12-03	95.00	NULL	30
7934	MILLER	CLERK	1982-01-23	1300.00	NULL	10
7566	JONES	MANAGER	1981-04-02	2975.00	NULL	20
7698	BLAKE	MANAGER	1981-05-01	2850.00	NULL	30
7782	CLARK	MANAGER	1981-06-09	2450.00	NULL	10

3. Display the ENAME **and** JOB **for all** employees who belong **to** the same DEPTNO **as** employee 'KING'.

```
mysql> select ename,job from emp where deptno=(select deptno from emp where ename='KING');
```

ename	job
CLARK	MANAGER
KING	PRESIDENT
MILLER	CLERK

4. Find the **names of all** employees hired **in** the **month of** February **(of any year)**.

```
Select * FROM emp WHERE Substr(Hiredate,4,2)='02';
```

```
mysql> Select * FROM emp WHERE Substr(Hiredate,6,2)='02';
```

EMPNO	ENAME	JOB	HIREDATE	SAL	COMM	DEPTNO
7499	ALLEN	SALESMAN	1981-02-20	1600.00	300.00	30
7521	WARDv	LESMAN	1981-02-22	1250.00	500.00	30

5. Display the employees **in** descending **order of** DEPTNO.

```
mysql> select * from emp as e,dept as d where e.deptno=d.deptno order by e.deptno desc;
```

EMPNO	ENAME	JOB	HIREDATE	SAL	COMM	DEPTNO	Deptno	DNAME
LOC								
7499	ALLEN	SALESMAN	1981-02-20	1600.00	300.00	30	30	SALES
CHICAGO								
7521	WARDv	LESMAN	1981-02-22	1250.00	500.00	30	30	SALES
CHICAGO								
7698	BLAKE	MANAGER	1981-05-01	2850.00	NULL	30	30	SALES
CHICAGO								
7844	TURNER	SALESMAN	1981-09-08	1500.00	0.00	30	30	SALES
CHICAGO								
7900	JAMES	CLERK	1981-12-03	95.00	NULL	30	30	SALES
CHICAGO								
7369	SMITH	CLERK	1980-12-17	800.00	NULL	20	20	RESEARCH
DALLAS								
7566	JONES	MANAGER	1981-04-02	2975.00	NULL	20	20	RESEARCH
DALLAS								
7788	SCOTT	ANALYST	1982-12-09	3000.00	NULL	20	20	RESEARCH
DALLAS								
7876	ADAMS	CLERK	1983-01-12	1100.00	NULL	20	20	RESEARCH
DALLAS								
7902	FORD	ANALYST	1981-12-03	3000.00	NULL	20	20	RESEARCH

DALLAS									
7782	CLARK	MANAGER	1981-06-09	2450.00	NULL	10	10	ACCOUNTING	
NEW YORK									
7839	KING	PRESIDENT	1981-11-17	5000.00	NULL	10	10	ACCOUNTING	
NEW YORK									
7934	MILLER	CLERK	1982-01-23	1300.00	NULL	10	10	ACCOUNTING	
NEW YORK									

6. Display the employee name **and** employee **number of** the employees **with** the headings **as NUMBER and NAME**.

```
mysql> select empno "Number",ename "NAME" from emp;
```

Number	NAME
7369	SMITH
7499	ALLEN
7521	WARD
7566	JONES
7654	MARTIN
7698	BLAKE
7782	CLARK
7788	SCOTT
7839	KING
7844	TURNER
7876	ADAMS
7900	JAMES
7902	FORD
7934	MILLER

7. Find the **names of all** employees who were hired **on** the **last day of** the **month**.

```
mysql> select last_day(Hiredate) from emp;
```

last_day(Hiredate)
1980-12-31
1981-02-28
1981-02-28
1981-04-30
1981-09-30
1981-05-31
1981-06-30
1982-12-31
1981-11-30
1981-09-30
1983-01-31
1981-12-31
1981-12-31
1982-01-31

8. Find the name **of** the employee who **is** receiving the maximum salary.

```
mysql> select ename,max(sal) from emp;
```

ename	max(sal)
SMITH	5000.00

9. Display the **sum of** SAL **for all** the employees belonging **to** DEPTNO 10.

```
mysql> select sum(sal) from emp where deptno=10;
```

sum(sal)

```
+-----+
|  8750.00  |
+-----+
```

10. Display the rows where JOB column ends with the letter 'T'.

```
mysql> select * from emp where job like '%T';
```

```
+-----+-----+-----+-----+-----+-----+
| EMPNO | ENAME | JOB       | HIREDATE | SAL      | COMM | DEPTNO |
+-----+-----+-----+-----+-----+-----+
|  7788 | SCOTT | ANALYST  | 1982-12-09 | 3000.00 | NULL | 20     |
|  7839 | KING  | PRESIDENT | 1981-11-17 | 5000.00 | NULL | 10     |
|  7902 | FORD  | ANALYST  | 1981-12-03 | 3000.00 | NULL | 20     |
+-----+-----+-----+-----+-----+-----+
```

11. Write a stored procedure to convert a temperature in Fahrenheit (F) to its equivalent in Celsius (C). The required formula is:- $C = (F - 32) * 5 / 9$. Insert the temperature in Centigrade into TEMPP table. Calling program for the stored procedure need not be written.

```
drop procedure if exists abc;
```

```
drop table if exists temp;
```

```
Create table temp
```

```
(
  Fahrenheit float,
  Temp_Celsius float

```

```
);
```

```
/* ..... */
```

```
delimiter //
```

```
create procedure abc(Fahrenheit float)
```

```
begin
```

```
  declare Temp_Celsius float;
```

```
    set Temp_Celsius=(Fahrenheit-32)*5/9;
```

```
    insert into temp values(Fahrenheit,Temp_Celsius);
```

```
end;//
```

```
delimiter ;
```

```
/* ..... */
```

```
call abc(100);
```

```
call abc(99);
```

```
call abc(98);
```

```
select * from temp;
```

```
mysql> select * from temp;
```

```
+-----+-----+
| Fahrenheit | Temp_Celsius |
+-----+-----+
|  100      |  37.7778    |
|  99       |  37.2222    |
|  98       |  36.6667    |
+-----+-----+
```

12. Write a stored function by the name of Num_cube. The stored function should return the cube of a number 'N'. The number 'N' should be passed to the stored function as a parameter. Calling program for the stored function need not be written.

Answer:

```
drop function if exists Num_cube;
```

```
drop PROCEDURE if exists pqr;
drop table if exists temp;
Create table temp
(
  Num varchar(20),
  Num_cube int
);
```

```
/* ..... */
```

```
delimiter //
```

```
create function Num_cube(N int)
  returns int
  deterministic
  begin
    return N*N*N;
  end; //
```

```
delimiter ;
```

```
/* ..... */
```

```
select Num_cube(10) from dual;
```

```
mysql> select Num_cube(10) from dual;
```

```
+-----+
| Num_cube(10) |
+-----+
|          1000 |
+-----+
```

```
=====
===
```