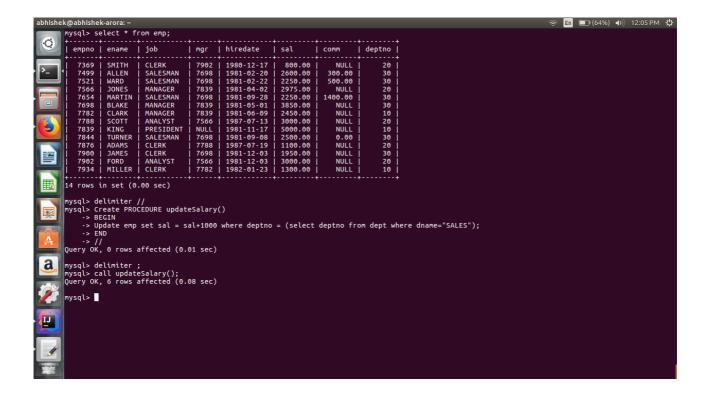1) Find all employees whose Employee name ends with 'N'. List the

employee number, the Employee name, and the last character of the Employee name.

```
mysql> select empno , ename, RIGHT(ename,1) as lastCharacter FROM emp where ename like ('%N');
+-------+--------+---------------+
| empno | ename  | lastCharacter |
+-------+--------+---------------+
|  7499 | ALLEN  | N             |
|  7654 | MARTIN | N             |
+-------+--------+---------------+
2 rows in set (0.00 sec)

mysql>
```

2) write a procedure to increment the sallary of employee who works in sales department

```
mysql> select * from emp;
+-------+--------+-----------+------+------------+---------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal     | comm    | deptno |
+-------+--------+-----------+------+------------+---------+---------+--------+
|  7369 | SMITH  | CLERK     | 7902 | 1980-12-17 |  800.00 |    NULL |     20 |
|  7499 | ALLEN  | SALESMAN  | 7698 | 1981-02-20 | 2600.00 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN  | 7698 | 1981-02-22 | 2250.00 |  500.00 |     30 |
|  7566 | JONES  | MANAGER   | 7839 | 1981-04-02 | 2975.00 |    NULL |     20 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1981-09-28 | 2250.00 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER   | 7839 | 1981-05-01 | 3850.00 |    NULL |     30 |
|  7782 | CLARK  | MANAGER   | 7839 | 1981-06-09 | 2450.00 |    NULL |     10 |
|  7788 | SCOTT  | ANALYST   | 7566 | 1987-07-13 | 3000.00 |    NULL |     20 |
|  7839 | KING   | PRESIDENT | NULL | 1981-11-17 | 5000.00 |    NULL |     10 |
|  7844 | TURNER | SALESMAN  | 7698 | 1981-09-08 | 2500.00 |    0.00 |     30 |
|  7876 | ADAMS  | CLERK     | 7788 | 1987-07-19 | 1100.00 |    NULL |     20 |
|  7900 | JAMES  | CLERK     | 7698 | 1981-12-03 | 1950.00 |    NULL |     30 |
|  7902 | FORD   | ANALYST   | 7566 | 1981-12-03 | 3000.00 |    NULL |     20 |
|  7934 | MILLER | CLERK     | 7782 | 1982-01-23 | 1300.00 |    NULL |     10 |
+-------+--------+-----------+------+------------+---------+---------+--------+
14 rows in set (0.00 sec)

mysql> delimiter //
mysql> Create PROCEDURE updateSalary()
    -> BEGIN
    -> Update emp set sal = sal+1000 where deptno = (select deptno from dept where dname="SALES");
    -> END
    -> //
Query OK, 0 rows affected (0.01 sec)

mysql> delimiter ;
mysql> call updateSalary();
Query OK, 6 rows affected (0.08 sec)

mysql>
```

```
mysql> SELECT * FROM emp;
+-------+--------+-----------+------+------------+---------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal     | comm    | deptno |
+-------+--------+-----------+------+------------+---------+---------+--------+
|  7369 | SMITH  | CLERK     | 7902 | 1980-12-17 |  800.00 |    NULL |     20 |
|  7499 | ALLEN  | SALESMAN  | 7698 | 1981-02-20 | 3600.00 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN  | 7698 | 1981-02-22 | 3250.00 |  500.00 |     30 |
|  7566 | JONES  | MANAGER   | 7839 | 1981-04-02 | 2975.00 |    NULL |     20 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1981-09-28 | 3250.00 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER   | 7839 | 1981-05-01 | 4850.00 |    NULL |     30 |
|  7782 | CLARK  | MANAGER   | 7839 | 1981-06-09 | 2450.00 |    NULL |     10 |
|  7788 | SCOTT  | ANALYST   | 7566 | 1987-07-13 | 3000.00 |    NULL |     20 |
|  7839 | KING   | PRESIDENT | NULL | 1981-11-17 | 5000.00 |    NULL |     10 |
|  7844 | TURNER | SALESMAN  | 7698 | 1981-09-08 | 3500.00 |    0.00 |     30 |
|  7876 | ADAMS  | CLERK     | 7788 | 1987-07-19 | 1100.00 |    NULL |     20 |
|  7900 | JAMES  | CLERK     | 7698 | 1981-12-03 | 2950.00 |    NULL |     30 |
|  7902 | FORD   | ANALYST   | 7566 | 1981-12-03 | 3000.00 |    NULL |     20 |
|  7934 | MILLER | CLERK     | 7782 | 1982-01-23 | 1300.00 |    NULL |     10 |
+-------+--------+-----------+------+------------+---------+---------+--------+
14 rows in set (0.00 sec)

mysql>
```

3) write a function to find the total salary of employees, who works in Accounts department

```
Terminal File Edit View Search Terminal Help                                          En   (57%)
mysql> delimiter //
mysql> DROP FUNCTION IF EXISTS totalSalary //
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql>
mysql> CREATE FUNCTION totalSalary()
    -> RETURNS DECIMAL
    ->
    ->    BEGIN
    ->        DECLARE totalSal DECIMAL(7,2) DEFAULT 0.00;
    ->
    ->        SELECT SUM(sal) INTO totalSal from emp WHERE deptno = (SELECT deptno FROM dept WHERE dname="ACCOUNTING");
    ->        RETURN totalSal;
    ->    END
    -> //
Query OK, 0 rows affected (0.00 sec)

mysql> delimiter ;
mysql> SELECT totalSalary();
+--------------+
| totalSalary() |
+--------------+
|         8750 |
+--------------+
1 row in set (0.00 sec)

mysql>
```

4) create a new table for keeping transaction records,record will be updated in this table when there is deduction in the salary,when salary is deducted a trigger is executed which insert employee name ,updatedby ,changedsalary,updateddate in new table.

```
ek@abhishek-arora: ~
mysql> CREATE TABLE SalaryTranctions(
    ->
    -> ename varchar(20),
    -> updatedBy varchar(50),
    -> updated_sal decimal(7,2),
    -> updated_On Date
    -> );
Query OK, 0 rows affected (0.43 sec)

mysql> DELIMITER //
mysql> CREATE TRIGGER salUpdateTrig AFTER UPDATE ON emp
    ->    FOR EACH ROW
    ->    BEGIN
    ->    IF NEW.sal < OLD.sal THEN
    -> insert into SalaryTransactions values(NEW.ename, CURRENT_USER() , NEW.sal, CURDATE());
    ->    END IF;
    ->    END; //
Query OK, 0 rows affected (0.11 sec)

mysql> DELIMITER ;
mysql> select * FROM emp;
+-------+--------+-----------+------+------------+---------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal     | comm    | deptno |
+-------+--------+-----------+------+------------+---------+---------+--------+
|  7369 | SMITH  | CLERK     | 7902 | 1980-12-17 |  800.00 |    NULL |     20 |
|  7499 | ALLEN  | SALESMAN  | 7698 | 1981-02-20 | 3600.00 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN  | 7698 | 1981-02-22 | 3250.00 |  500.00 |     30 |
|  7566 | JONES  | MANAGER   | 7839 | 1981-04-02 | 2975.00 |    NULL |     20 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1981-09-28 | 3250.00 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER   | 7839 | 1981-05-01 | 4850.00 |    NULL |     30 |
|  7782 | CLARK  | MANAGER   | 7839 | 1981-06-09 | 2450.00 |    NULL |     10 |
|  7788 | SCOTT  | ANALYST   | 7566 | 1987-07-13 | 3000.00 |    NULL |     20 |
|  7839 | KING   | PRESIDENT | NULL | 1981-11-17 | 5000.00 |    NULL |     10 |
|  7844 | TURNER | SALESMAN  | 7698 | 1981-09-08 | 3500.00 |    0.00 |     30 |
|  7876 | ADAMS  | CLERK     | 7788 | 1987-07-19 | 1100.00 |    NULL |     20 |
|  7900 | JAMES  | CLERK     | 7698 | 1981-12-03 | 2950.00 |    NULL |     30 |
|  7902 | FORD   | ANALYST   | 7566 | 1981-12-03 | 3000.00 |    NULL |     20 |
|  7934 | MILLER | CLERK     | 7782 | 1982-01-23 | 1300.00 |    NULL |     10 |
+-------+--------+-----------+------+------------+---------+---------+--------+
14 rows in set (0.00 sec)

mysql>
```

```
mysql> UPDATE emp set sal=700 where deptno=20;
Query OK, 5 rows affected (0.15 sec)
Rows matched: 5  Changed: 5  Warnings: 0

mysql> select * FROM SalaryTransactions;
+-------+----------------+-------------+------------+
| ename | updatedBy      | updated_sal | updated_On |
+-------+----------------+-------------+------------+
| SMITH | root@localhost |      700.00 | 2018-02-20 |
| JONES | root@localhost |      700.00 | 2018-02-20 |
| SCOTT | root@localhost |      700.00 | 2018-02-20 |
| ADAMS | root@localhost |      700.00 | 2018-02-20 |
| FORD  | root@localhost |      700.00 | 2018-02-20 |
+-------+----------------+-------------+------------+
5 rows in set (0.00 sec)

mysql>
```