NAME: SANJINA KUMARI

CLASS: BS(CS IV)

SECTION: B

LAB 1: DATABASES

1. Write a query to display the names (first_name, last_name) using alias name “First Name", "Last Name"

mysql> select first_name as 'first name' , last_name as 'last name' from employees limit 10;

+------------+-----------+

| first name | last name |

+------------+-----------+

| Steven | King |

| Neena | Kochhar |

| Lex | De Haan |

| Alexander | Hunold |

| Bruce | Ernst |

| David | Austin |

| Valli | Pataballa |

| Diana | Lorentz |

| Nancy | Greenberg |

| Daniel | Faviet |

+------------+-----------+

10 rows in set (0.00 sec)

2. Write a query to get unique department ID from employee table

mysql> select distinct department_id from employees;

+---------------+

| department_id |

+---------------+

| NULL |

| 10 |

| 20 |

| 30 |

| 40 |

| 50 |

| 60 |

| 70 |

| 80 |

| 90 |

| 100 |

| 110 |

+---------------+

12 rows in set (0.00 sec)

3. Write a query to get all employee details from the employee table order by first name,descending.

mysql> select* from employees order by first_name desc limit 10;

+-------------+------------+-----------+----------+--------------------+------------+------------+---------+----------------+---------------+

| employee_id | first_name | last_name | email | phone_number | hire_date | job_id | salary | commission_pct | manager_id | department_id |

+-------------+------------+-----------+----------+--------------------+------------+------------+---------+----------------+---------------+

| 180 | Winston | Taylor | WTAYLOR | 650.507.9876 | 1998-01-24 | SH_CLERK | 3200.00 | NULL | 120 | 50 |

| 171 | William | Smith | WSMITH | 011.44.1343.629268 | 1999-02-23 | SA_REP | 7400.00 | 0.15 | 148 | 80 |

| 206 | William | Gietz | WGIETZ | 51hr5.123.8181 | 1994-06-07 | AC_ACCOUNT | 8300.00 | NULL | 205 | 110 |

| 195 | Vance | Jones | VJONES | 650.501.4876 | 1999-03-17 | SH_CLERK | 2800.00 | NULL | 123 | 50 |

| 106 | Valli | Pataballa | VPATABAL | 590.423.4560 | 1998-02-05 | IT_PROG | 4800.00 | NULL | 103 | 60 |

| 141 | Trenna | Rajs | TRAJS | 650.121.8009 | 1995-10-17 | ST_CLERK | 3500.00 | NULL | 124 | 50 |

| 132 | TJ | Olson | TJOLSON | 650.124.8234 | 1999-04-10 | ST_CLERK | 2100.00 | NULL | 121 | 50 |

| 190 | Timothy | Gates | TGATES | 650.505.3876 | 1998-07-11 | SH_CLERK | 2900.00 | NULL | 122 | 50 |

| 170 | Tayler | Fox | TFOX | 011.44.1343.729268 | 1998-01-24 | SA_REP | 9600.00 | 0.20 | 148 | 80 |

| 203 | Susan | Mavris | SMAVRIS | 515.123.7777 | 1994-06-07 | HR_REP | 6500.00 | NULL | 101 | 40 |

+-------------+------------+-----------+----------+--------------------+------------+------------+---------+----------------+---------------+

10 rows in set (0.00 sec)

4. Write a query to get the employee ID, names (first_name, last_name), salary in ascending order of salary.

```
select employee_id , first_name , last_name  , salary from employees order by salary  asc limit 5;
```

+-------------+------------+------------+---------+

| employee_id | first_name | last_name | salary |

+-------------+------------+------------+---------+

| 132 | TJ | Olson | 2100.00 |

| 128 | Steven | Markle | 2200.00 |

| 136 | Hazel | Philtanker | 2200.00 |

| 135 | Ki | Gee | 2400.00 |

| 127 | James | Landry | 2400.00 |

+-------------+------------+------------+---------+

5 rows in set (0.00 sec)

5. Write a query to get the total salaries payable to employees.

```
mysql> select sum(salary) from employees;
```

+-------------+

```
| sum(salary) |
+-------------+
|   691400.00 |
+-------------+
1 row in set (0.00 sec)
```

6. Write a query to get the maximum and minimum salary from employees table.

```
mysql> select min(salary) , max(salary) from employees;
+-------------+-------------+
| min(salary) | max(salary) |
+-------------+-------------+
|     2100.00 |    24000.00 |
+-------------+-------------+
1 row in set (0.00 sec)
```

7. Write a query to get the average salary and number of employees in the employees

table.

```
mysql> select avg(salary) , count(employee_id) from employees;
+-------------+--------------------+
| avg(salary) | count(employee_id) |
+-------------+--------------------+
| 6461.682243 |                107 |
+-------------+--------------------+
1 row in set (0.00 sec)
```

8. Write a query to get the number of jobs available in the employees table.

```
mysql> select count(distinct job_id) from employees;
+------------------------+
| count(distinct job_id) |
+------------------------+
```

```
|                19 |
+-------------------------+
1 row in set (0.03 sec)
```

9. Write a query get all first name from employees table in upper case.

```
mysql> select upper(first_name) from employees;
+-------------------+
| upper(first_name) |
+-------------------+
| STEVEN            |
| NEENA             |
| LEX               |
| ALEXANDER         |
| BRUCE             |
| DAVID             |
| VALLI             |
| DIANA             |
| NANCY             |
| DANIEL            |
| JOHN              |
| ISMAEL            |
| JOSE MANUEL       |
| LUIS              |
| DEN               |
| ALEXANDER         |
| SHELLI            |
| SIGAL             |
| GUY               |
| KAREN             |
| MATTHEW           |
```

| ADAM |

| PAYAM |

| SHANTA |

| KEVIN |

| JULIA |

| IRENE |

| JAMES |

| STEVEN |

| LAURA |

| MOZHE |

| JAMES |

| TJ |

| JASON |

| MICHAEL |

| KI |

| HAZEL |

| RENSKE |

| STEPHEN |

| JOHN |

| JOSHUA |

| TRENNA |

| CURTIS |

| RANDALL |

| PETER |

| JOHN |

| KAREN |

| ALBERTO |

| GERALD |

| ELENI |

| PETER |

| DAVID |

| PETER |

| CHRISTOPHER |

| NANETTE |

| OLIVER |

| JANETTE |

| PATRICK |

| ALLAN |

| LINDSEY |

| LOUISE |

| SARATH |

| CLARA |

| DANIELLE |

| MATTEA |

| DAVID |

| SUNDAR |

| AMIT |

| LISA |

| HARRISON |

| TAYLER |

| WILLIAM |

| ELIZABETH |

| SUNDITA |

| ELLEN |

| ALYSSA |

| JONATHON |

| JACK |

| KIMBERELY |

| CHARLES |

| WINSTON |

| JEAN |

| MARTHA |

| GIRARD |

| NANDITA |

| ALEXIS |

| JULIA |

| ANTHONY |

| KELLY |

| JENNIFER |

| TIMOTHY |

| RANDALL |

| SARAH |

| BRITNEY |

| SAMUEL |

| VANCE |

| ALANA |

| KEVIN |

| DONALD |

| DOUGLAS |

| JENNIFER |

| MICHAEL |

| PAT |

| SUSAN |

| HERMANN |

| SHELLEY |

| WILLIAM |

+------------------+

107 rows in set (0.00 sec)

10. Write a query to select first 10 records from a table.

```
mysql> select* from employees limit 10;
+-------------+------------+-----------+----------+--------------+------------+------------+----------+----------------+-----------
+---------------+
| employee_id | first_name | last_name | email    | phone_number | hire_date  | job_id     | salary   |
commission_pct | manager_id | department_id |
+-------------+------------+-----------+----------+--------------+------------+------------+----------+----------------+-----------
+---------------+
|       100 | Steven     | King      | SKING    | 515.123.4567 | 1987-06-17 | AD_PRES    | 24000.00 |
NULL |      NULL |          90 |
|       101 | Neena      | Kochhar   | NKOCHHAR | 515.123.4568 | 1989-09-21 | AD_VP      | 17000.00 |
NULL |       100 |          90 |
|       102 | Lex        | De Haan   | LDEHAAN  | 515.123.4569 | 1993-01-13 | AD_VP      | 17000.00 |
NULL |       100 |          90 |
|       103 | Alexander  | Hunold    | AHUNOLD  | 590.423.4567 | 1990-01-03 | IT_PROG    |  9000.00 |
NULL |       102 |          60 |
|       104 | Bruce      | Ernst     | BERNST   | 590.423.4568 | 1991-05-21 | IT_PROG    |  6000.00 |
NULL |       103 |          60 |
|       105 | David      | Austin    | DAUSTIN  | 590.423.4569 | 1997-06-25 | IT_PROG    |  4800.00 |
NULL |       103 |          60 |
|       106 | Valli      | Pataballa | VPATABAL | 590.423.4560 | 1998-02-05 | IT_PROG    |  4800.00 |
NULL |       103 |          60 |
|       107 | Diana      | Lorentz   | DLORENTZ | 590.423.5567 | 1999-02-07 | IT_PROG    |  4200.00 |
NULL |       103 |          60 |
|       108 | Nancy      | Greenberg | NGREENBE | 515.124.4569 | 1994-08-17 | FI_MGR     | 12000.00 |
NULL |       101 |         100 |
|       109 | Daniel     | Faviet    | DFAVIET  | 515.124.4169 | 1994-08-16 | FI_ACCOUNT |  9000.00 |
NULL |       108 |         100 |
+-------------+------------+-----------+----------+--------------+------------+------------+----------+----------------+-----------
+---------------+
10 rows in set (0.00 sec)
```

11. Write a query to select 3rd & 4th record of employees table.

```
mysql> select* from employees order by employee_id limit 2 offset 2;

+-------------+------------+-----------+---------+--------------+------------+---------+----------+----------------+------------+---
------------+

| employee_id | first_name | last_name | email   | phone_number | hire_date  | job_id  | salary   |
commission_pct | manager_id | department_id |

+-------------+------------+-----------+---------+--------------+------------+---------+----------+----------------+------------+---
------------+

|         102 | Lex        | De Haan   | LDEHAAN | 515.123.4569 | 1993-01-13 | AD_VP   | 17000.00 |
NULL |       100 |           90 |

|         103 | Alexander  | Hunold    | AHUNOLD | 590.423.4567 | 1990-01-03 | IT_PROG |  9000.00 |
NULL |       102 |           60 |

+-------------+------------+-----------+---------+--------------+------------+---------+----------+----------------+------------+---
------------+

2 rows in set (0.00 sec)
```

12. Write a query to select 2nd last record of employees table.

```
mysql> SELECT *

   -> FROM employees

   -> ORDER BY employee_id DESC

   -> LIMIT 1 OFFSET 1;

+-------------+------------+-----------+----------+--------------+------------+--------+----------+----------------+------------+---
------------+

| employee_id | first_name | last_name | email    | phone_number | hire_date  | job_id | salary   |
commission_pct | manager_id | department_id |

+-------------+------------+-----------+----------+--------------+------------+--------+----------+----------------+------------+---
------------+

|         205 | Shelley    | Higgins   | SHIGGINS | 515.123.8080 | 1994-06-07 | AC_MGR | 12000.00 |
NULL |       101 |           110 |

+-------------+------------+-----------+----------+--------------+------------+--------+----------+----------------+------------+---
------------+

1 row in set (0.00 sec)
```