MODEL PRACTICAL EXAMINATION

7.

```
mysql> CREATE TABLE Department (
    -> department_id INT PRIMARY KEY,
    -> department_name VARCHAR(100)
    -> );
Query OK, 0 rows affected (0.04 sec)

mysql> CREATE TABLE Employee (
    -> employee_id INT PRIMARY KEY,
    -> employee_name VARCHAR(100),
    -> salary DECIMAL(10, 2),
    -> department_id INT,
    -> manager_id INT,
    -> location VARCHAR(100));
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> INSERT INTO Department (department_id, department_name) values
    -> (1,'HR'),
    -> (2,'Finance'),
    -> (3,'Marketing');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> INSERT INTO Employee (employee_id, employee_name, salary, department_id, manager_id, location) values
    -> (1, 'Josh', 60000.00, 1, 3, 'Delhi');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO Employee (employee_id, employee_name, salary, department_id, manager_id, location) values
    -> (2, 'Yash', 75000.00, 1, NULL, 'Chennai'),
    -> (3, 'Surya', 45000.00, 2, 6, 'Delhi'),
    -> (4, 'Vinay', 50000.00, 2, 6, 'Mangalore'),
    -> (5, 'Vaishu', 85000.00, 2, NULL, 'Delhi');
Query OK, 4 rows affected (0.01 sec)
Records: 4  Duplicates: 0  Warnings: 0
```

```
mysql> select * from Employee;
+-------------+---------------+----------+---------------+------------+-----------+
| employee_id | employee_name | salary   | department_id | manager_id | location  |
+-------------+---------------+----------+---------------+------------+-----------+
|           1 | Josh          | 60000.00 |             1 |          3 | Delhi     |
|           2 | Yash          | 75000.00 |             1 |       NULL | Chennai   |
|           3 | Surya         | 45000.00 |             2 |          6 | Delhi     |
|           4 | Vinay         | 50000.00 |             2 |          6 | Mangalore |
|           5 | Vaishu        | 85000.00 |             2 |       NULL | Delhi     |
+-------------+---------------+----------+---------------+------------+-----------+
5 rows in set (0.01 sec)

mysql> Select * from Department;
+---------------+-----------------+
| department_id | department_name |
+---------------+-----------------+
|             1 | HR              |
|             2 | Finance         |
|             3 | Marketing       |
+---------------+-----------------+
3 rows in set (0.00 sec)

mysql> select e.employee_name
    -> from Employee e
    -> join Employee m ON e.manager_id = m.employee_id
    -> where e.salary > m.salary;
+---------------+
| employee_name |
+---------------+
| Josh          |
+---------------+
1 row in set (0.01 sec)
```

```
mysql> select e.employee_name
    -> from Employee e
    -> join(
    -> select department_id, MAX(salary) AS Maxsalary
    -> from Employee
    -> group by department_id
    -> ) max_salaries ON e.department_id = max_salaries.department_id AND e.salary = max_salaries.Maxsalary;
+---------------+
| employee_name |
+---------------+
| Yash          |
| Vaishu        |
+---------------+
2 rows in set (0.01 sec)

mysql> select e1.employee_name, e2.employee_name, e1.location
    -> from Employee e1, Employee e2
    -> where e1.employee_id < > e2.employee_id
    -> AND e1.location = e2.location;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the righ
t syntax to use near '> e2.employee_id
AND e1.location = e2.location' at line 3
mysql> SELECT e1.employee_name, e2.employee_name, e1.location
    -> FROM Employee e1
    -> INNER JOIN Employee e2 ON e1.location = e2.location AND e1.employee_id < e2.employee_id;
+---------------+---------------+----------+
| employee_name | employee_name | location |
+---------------+---------------+----------+
| Josh          | Surya         | Delhi    |
| Josh          | Vaishu        | Delhi    |
| Surya         | Vaishu        | Delhi    |
+---------------+---------------+----------+
3 rows in set (0.01 sec)
```

```
mysql> SELECT e.employee_name
    -> FROM Employee e
    -> GROUP BY e.employee_id
    -> HAVING SUM(e.salary) = (
    -> SELECT MIN(total_salary)
    ->  FROM (
    -> SELECT department_id, SUM(salary) AS total_salary
    ->  FROM Employee
    -> GROUP BY department_id
    ->  ) AS min_salary
    -> );
Empty set (0.01 sec)

mysql> select e.employee_name
    -> from Employee e
    -> join(
    -> select department_id,MIN(salary) AS Minsalary
    -> from Employee
    -> group by department_id
    -> ) min_salaries ON e.department_id = min_salaries.departme
nt_id
    -> where e.salary = min_salaries.Minsalary;
+---------------+
| employee_name |
+---------------+
| Josh          |
| Surya         |
+---------------+
2 rows in set (0.00 sec)
```

```
mysql> select department_id
    -> from Employee
    -> group by department_id
    -> having count(*) = 0;
Empty set (0.00 sec)

mysql> select department_name
    -> from Department d
    -> left join Employee e ON d.department_id = e.department_id
    -> where e.employee_id is NULL;
+-----------------+
| department_name |
+-----------------+
| Marketing       |
+-----------------+
1 row in set (0.01 sec)

mysql>
```