SQL ASSIGNMENT – 2

Create a Database with Tables having the following

data :

employeeData

(1, &#39;Madhuri&#39;, &#39;Sripada&#39;, 100000, &#39;19-02-01 09.00.00&#39;,

&#39;HR&#39;),

(2, &#39;Haritha&#39;, &#39;Verma&#39;, 80000, &#39;19-01-10 09.00.00&#39;,

&#39;Admin&#39;),

(3, &#39;Vimal&#39;, &#39;Rao&#39;, 300000, &#39;19-03-10 09.00.00&#39;,

&#39;HR&#39;), (4, &#39;Amrita&#39;, &#39;Prasad&#39;, 500000, &#39;19-03-10

09.00.00&#39;, &#39;Admin&#39;),

(5, &#39;Vidhi&#39;, &#39;Agarwal&#39;, 500000, &#39;19-02-11 09.00.00&#39;,

&#39;Admin&#39;),

(6, &#39;Nitya&#39;, &#39;Prasad&#39;, 200000, &#39;19-02-11 09.00.00&#39;,

&#39;Account&#39;),

(7, &#39;Sravan&#39;, &#39;Kumar&#39;, 75000, &#39;19-04-20 09.00.00&#39;,

&#39;Account&#39;),

(8, &#39;Girish&#39;, &#39;Varma&#39;, 90000, &#39;19-04-11 09.00.00&#39;,

&#39;Admin&#39;);

incentivesData

(1, 8000, &#39;19-06-15&#39;),

(2, 10000, &#39;19-05-11&#39;),

(3, 45000, &#39;19-05-20&#39;),

(1, 9500, &#39;19-06-20&#39;),

(2, 3500, &#39;19-06-11&#39;);

jobRoles

(1, &#39;Manager&#39;, &#39;2019-02-01 00:00:00&#39;), (2,

&#39;Executive&#39;, &#39;2019-06-01 00:00:00&#39;), (8,

&#39;Executive&#39;, &#39;2019-06-01 00:00:00&#39;), (5,

&#39;Manager&#39;, &#39;2019-06-01 00:00:00&#39;), (4,

&#39;Asst. Manager&#39;, &#39;2019-06-01 00:00:00&#39;),

(7, &#39;Executive&#39;, &#39;2019-06-01 00:00:00&#39;), (6,

&#39;Team Lead&#39;, &#39;2019-06-01 00:00:00&#39;), (3,

&#39;Team Lead&#39;, &#39;2019-06-01 00:00:00&#39;);

Write SQL queries for the following questions using

the above data. (Please provide the outputs also) 1.

Display last name as employee\_last\_name. 2. Display

fname and lname as employee\_fullname. 3. Display fname,

lname in upper case.

4. Display unique dept from emp table.

5. Display emp fname in asc order.

6. Print details of employees &#39;amrita&#39; and &#39;nitya&#39;.

7. Details of emps except &#39;girish&#39; and &#39;sravan&#39;. 8.

Display emps from hr dept.

9. Details of emps whose name starts with &#39;A&#39;.

10. Details of emps whose name contains &#39;A&#39;.

11. emp details of salaries who are earning between 2.5 - 5

lacs.

12. Write a query to display employee fullname who are

earing above between 70,000 and below 2 lacs. 13. Write a

query to display to get dept name and number of employees

in dept.

14. To display employees who are managers.

15. Print details of employees who got incentives. 16.

Display max salary from each dept (department wise

max salary).

17. Print emp name and dept name and bonus amount who

got highest bonus.

18. Display details of emp who is earing max salary. 19.

Print emp last name , dept , salary of employees who is

earing max salary in each department.

20. Print emp details who is earning lowest salary. 21.

Print the emp last name, job role and effective date for

each employee.

22. Print emp lastname.

Employee – Employee code, First name, Last name, Salary, DOJ, Department

Incentives – Employee Code, Incentive Amount, Incentive date

Job Roles – Employee Code, Job Role, Effective date

create table Employee(

Emp\_Code int,

FirstName varchar(20),

LastName varchar(20),

Salary int,

DOJ DATETIME,

Department varchar(20)

);

insert into Employee(Emp\_Code, FirstName, LastName, Salary, Doj, Department) values

(1, 'Madhuri', 'Sripada', 100000, '19-02-01 09.00.00', 'HR'),

(2, 'Haritha', 'Verma', 80000, '19-01-10 09.00.00', 'Admin'),

(3, 'Vimal', 'Rao', 300000, '19-03-10 09.00.00', 'HR'),

(4, 'Amrita', 'Prasad', 500000, '19-03-10 09.00.00', 'Admin'),

(5, 'Vidhi', 'Agarwal', 500000, '19-02-11 09.00.00', 'Admin'),

(6, 'Nitya', 'Prasad', 200000, '19-02-11 09.00.00', 'Account'),

(7, 'Sravan', 'Kumar', 75000, '19-04-20 09.00.00', 'Account'),

(8, 'Girish', 'Verma', 90000, '19-04-11 09.00.00', 'Admin');

select \* from Employee;

Output

| **Emp\_Code** | **FirstName** | **LastName** | **Salary** | **DOJ** | **Department** |
| --- | --- | --- | --- | --- | --- |
| 1 | Madhuri | Sripada | 100000 | 2019-02-01 09:00:00 | HR |
| 2 | Haritha | Verma | 80000 | 2019-01-10 09:00:00 | Admin |
| 3 | Vimal | Rao | 300000 | 2019-03-10 09:00:00 | HR |
| 4 | Amrita | Prasad | 500000 | 2019-03-10 09:00:00 | Admin |
| 5 | Vidhi | Agarwal | 500000 | 2019-02-11 09:00:00 | Admin |
| 6 | Nitya | Prasad | 200000 | 2019-02-11 09:00:00 | Account |
| 7 | Sravan | Kumar | 75000 | 2019-04-20 09:00:00 | Account |
| 8 | Girish | Verma | 90000 | 2019-04-11 09:00:00 | Admin |
|  |  |  |  |  |  |

create table Incentive (Eid int, Inc\_Amt int, Inc\_date date);

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

insert into Incentive(Eid, Inc\_Amt, Inc\_date)

values

(1, 8000, '19-06-15'),

(2, 10000, '19-05-11'),

(3, 45000, '19-05-20'),

(1, 9500, '19-06-20'),

(2, 3500, '19-06-11');

select \* from Incentive;

Output

| **Eid** | **Inc\_Amt** | **Inc\_date** |
| --- | --- | --- |
| 1 | 8000 | 2019-06-15 |
| 2 | 10000 | 2019-05-11 |
| 3 | 45000 | 2019-05-20 |
| 1 | 9500 | 2019-06-20 |
| 2 | 3500 | 2019-06-11 |
|  |  |  |

create table JobRole (Jid int, Job\_Role varchar(30), Job\_date DATETime);

insert into JobRole(Jid, Job\_Role, Job\_date)

values

(1, 'Manager','2019-02-01 00:00:00'),

(2, 'Executive', '2019-06-01 00:00:00'),

(8,'Executive', '2019-06-01 00:00:00'),

(5, 'Manager', '2019-06-01 00:00:00'),

(4,'Asst. Manager','2019-06-01 00:00:00'),

(7, 'Executive', '2019-06-01 00:00:00'),

(6, 'Team Lead', '2019-06-01 00:00:00'),

(3, 'Team Lead', '2019-06-01 00:00:00');

select \* from JobRole;

Output

| **Jid** | **Job\_Role** | **Job\_date** |
| --- | --- | --- |
| 1 | Manager | 2019-02-01 00:00:00 |
| 2 | Executive | 2019-06-01 00:00:00 |
| 8 | Executive | 2019-06-01 00:00:00 |
| 5 | Manager | 2019-06-01 00:00:00 |
| 4 | Asst. Manager | 2019-06-01 00:00:00 |
| 7 | Executive | 2019-06-01 00:00:00 |
| 6 | Team Lead | 2019-06-01 00:00:00 |
| 3 | Team Lead | 2019-06-01 00:00:00 |

Schema

create table Employee(

Emp\_Code int,

FirstName varchar(20),

LastName varchar(20),

Salary int,

DOJ DATETIME,

Department varchar(20)

);

create table Incentive (Eid int, Inc\_Amt int, Inc\_date date);

create table JobRole (Jid int, Job\_Role varchar(30), Job\_date DATETime);

Query

insert into Employee(Emp\_Code, FirstName, LastName, Salary, Doj, Department) values

(1, 'Madhuri', 'Sripada', 100000, '19-02-01 09.00.00', 'HR'),

(2, 'Haritha', 'Verma', 80000, '19-01-10 09.00.00', 'Admin'),

(3, 'Vimal', 'Rao', 300000, '19-03-10 09.00.00', 'HR'),

(4, 'Amrita', 'Prasad', 500000, '19-03-10 09.00.00', 'Admin'),

(5, 'Vidhi', 'Agarwal', 500000, '19-02-11 09.00.00', 'Admin'),

(6, 'Nitya', 'Prasad', 200000, '19-02-11 09.00.00', 'Account'),

(7, 'Sravan', 'Kumar', 75000, '19-04-20 09.00.00', 'Account'),

(8, 'Girish', 'Verma', 90000, '19-04-11 09.00.00', 'Admin');

select \* from Employee;

insert into Incentive(Eid, Inc\_Amt, Inc\_date)

values

(1, 8000, '19-06-15'),

(2, 10000, '19-05-11'),

(3, 45000, '19-05-20'),

(1, 9500, '19-06-20'),

(2, 3500, '19-06-11');

select \* from Incentive;

insert into JobRole(Jid, Job\_Role, Job\_date)

values

(1, 'Manager','2019-02-01 00:00:00'),

(2, 'Executive', '2019-06-01 00:00:00'),

(8,'Executive', '2019-06-01 00:00:00'),

(5, 'Manager', '2019-06-01 00:00:00'),

(4,'Asst. Manager','2019-06-01 00:00:00'),

(7, 'Executive', '2019-06-01 00:00:00'),

(6, 'Team Lead', '2019-06-01 00:00:00'),

(3, 'Team Lead', '2019-06-01 00:00:00');

select \* from JobRole;

Question1

1.

Display last name as employee\_last\_name.

Ans:

select LastName as employee\_last\_name from Employee;

Output

| **employee\_last\_name** |
| --- |
| Sripada |
| Verma |
| Rao |
| Prasad |
| Agarwal |
| Prasad |
| Kumar |
| Verma |

2. Display fname and lname as employee\_fullname.

Ans :

select concat(Firstname,' ', LastName) as employee\_fullname from Employee;

Output:

| **employee\_fullname** |
| --- |
| Madhuri Sripada |
| Haritha Verma |
| Vimal Rao |
| Amrita Prasad |
| Vidhi Agarwal |
| Nitya Prasad |
| Sravan Kumar |
| Girish Verma |
|  |

3. Display fname, lname in upper case.

Ans :

select upper (Firstname) from Employee;

select upper (LastName) from Employee;

Output

| **upper (Firstname)** |
| --- |
| MADHURI |
| HARITHA |
| VIMAL |
| AMRITA |
| VIDHI |
| NITYA |
| SRAVAN |
| GIRISH |

| **upper (LastName)** |
| --- |
| SRIPADA |
| VERMA |
| RAO |
| PRASAD |
| AGARWAL |
| PRASAD |
| KUMAR |
| VERMA |

4. Display unique dept from emp table.

Answer:

select DISTINCT Department from Employee;

Output:

| **Department** |
| --- |
| HR |
| Admin |
| Account |

5. Display emp fname in asc order.

Answer:

select FirstName from Employee ORDER BY FirstName ASC;

Output:

| **FirstName** |
| --- |
| Amrita |
| Girish |
| Haritha |
| Madhuri |
| Nitya |
| Sravan |
| Vidhi |
| Vimal |

6. Print details of employees &#39;amrita&#39; and &#39;nitya&#39;.

Ans :

select \* from Employee where FirstName in ( "Amrita", "Nitya");

| **Emp\_Code** | **FirstName** | **LastName** | **Salary** | **DOJ** | **Department** |
| --- | --- | --- | --- | --- | --- |
| 4 | Amrita | Prasad | 500000 | 2019-03-10 09:00:00 | Admin |
| 6 | Nitya | Prasad | 200000 | 2019-02-11 09:00:00 | Account |
|  |  |  |  |  |  |

7. Details of emps except &#39;girish&#39; and &#39;sravan&#39;.

Answer:

SELECT \* FROM Employee where FirstName not in ("Girish", "Sravan");

Output:

| **Emp\_Code** | **FirstName** | **LastName** | **Salary** | **DOJ** | **Department** |
| --- | --- | --- | --- | --- | --- |
| 1 | Madhuri | Sripada | 100000 | 2019-02-01 09:00:00 | HR |
| 2 | Haritha | Verma | 80000 | 2019-01-10 09:00:00 | Admin |
| 3 | Vimal | Rao | 300000 | 2019-03-10 09:00:00 | HR |
| 4 | Amrita | Prasad | 500000 | 2019-03-10 09:00:00 | Admin |
| 5 | Vidhi | Agarwal | 500000 | 2019-02-11 09:00:00 | Admin |
| 6 | Nitya | Prasad | 200000 | 2019-02-11 09:00:00 | Account |
|  |  |  |  |  |  |

8. Display emps from hr dept.

Answer:

select \* from Employee where Department="HR";

Output:

| **Emp\_Code** | **FirstName** | **LastName** | **Salary** | **DOJ** | **Department** |
| --- | --- | --- | --- | --- | --- |
| 1 | Madhuri | Sripada | 100000 | 2019-02-01 09:00:00 | HR |
| 3 | Vimal | Rao | 300000 | 2019-03-10 09:00:00 | HR |
|  |  |  |  |  |  |

9. Details of emps whose name starts with A

Answer:

select \* from Employee where FirstName like "a%";

Output:

| **Emp\_Code** | **FirstName** | **LastName** | **Salary** | **DOJ** | **Department** |
| --- | --- | --- | --- | --- | --- |
| 4 | Amrita | Prasad | 500000 | 2019-03-10 09:00:00 | Admin |
|  |  |  |  |  |  |

10. Details of emps whose name contains “A”

Answer:

select \* from Employee where FirstName like "%a%";

Output:

| **Emp\_Code** | **FirstName** | **LastName** | **Salary** | **DOJ** | **Department** |
| --- | --- | --- | --- | --- | --- |
| 1 | Madhuri | Sripada | 100000 | 2019-02-01 09:00:00 | HR |
| 2 | Haritha | Verma | 80000 | 2019-01-10 09:00:00 | Admin |
| 3 | Vimal | Rao | 300000 | 2019-03-10 09:00:00 | HR |
| 4 | Amrita | Prasad | 500000 | 2019-03-10 09:00:00 | Admin |
| 6 | Nitya | Prasad | 200000 | 2019-02-11 09:00:00 | Account |
| 7 | Sravan | Kumar | 75000 | 2019-04-20 09:00:00 | Account |
|  |  |  |  |  |  |

11. emp details of salaries who are earning between 2.5 - 5lacs.

Answer:

select \* from Employee where Salary between 250000 and 500000;

Output:

| **Emp\_Code** | **FirstName** | **LastName** | **Salary** | **DOJ** | **Department** |
| --- | --- | --- | --- | --- | --- |
| 3 | Vimal | Rao | 300000 | 2019-03-10 09:00:00 | HR |
| 4 | Amrita | Prasad | 500000 | 2019-03-10 09:00:00 | Admin |
| 5 | Vidhi | Agarwal | 500000 | 2019-02-11 09:00:00 | Admin |
|  |  |  |  |  |  |

12. Write a query to display employee fullname who are

earing above between 70,000 and below 2 lacs.

Answer:

select concat(FirstName,' ',LastName) as Fullname from Employee where Salary between 70000 and 200000;

And

select concat(FirstName,' ',LastName) as Fullname, Salary from Employee where Salary between 70000 and 200000;

Output:

| **Fullname** |
| --- |
| Madhuri Sripada |
| Haritha Verma |
| Nitya Prasad |
| Sravan Kumar |
| Girish Verma |
|  |

13. Write a query to display to get dept name and number of employees in dept.

Answer:

select Department, count(Emp\_Code) from Employee Group By Department;

Output:

| **Department** | **count(Emp\_Code)** |
| --- | --- |
| Account | 2 |
| Admin | 4 |
| HR | 2 |
|  |  |

14. To display employees who are managers.

select \* from Employee where (Emp\_Code IN (SELECT Jid FROM JobRole where Job\_Role="Manager"));

Output:

| **Emp\_Code** | **FirstName** | **LastName** | **Salary** | **DOJ** | **Department** |
| --- | --- | --- | --- | --- | --- |
| 1 | Madhuri | Sripada | 100000 | 2019-02-01 09:00:00 | HR |
| 5 | Vidhi | Agarwal | 500000 | 2019-02-11 09:00:00 | Admin |
|  |  |  |  |  |  |

15. Print details of employees who got incentives.

Answer:

select \* from Employee where (Emp\_Code IN (SELECT Eid FROM Incentive));

Output:

| **Emp\_Code** | **FirstName** | **LastName** | **Salary** | **DOJ** | **Department** |
| --- | --- | --- | --- | --- | --- |
| 1 | Madhuri | Sripada | 100000 | 2019-02-01 09:00:00 | HR |
| 2 | Haritha | Verma | 80000 | 2019-01-10 09:00:00 | Admin |
| 3 | Vimal | Rao | 300000 | 2019-03-10 09:00:00 | HR |
|  |  |  |  |  |  |

16. Display max salary from each dept (department wisemax salary).

Answer:

select Department, max(Salary) from Employee group by Department;

Output:

| **Department** | **max(Salary)** |
| --- | --- |
| Account | 200000 |
| Admin | 500000 |
| HR | 300000 |
|  |  |

17. Print emp name and dept name and bonus amount who got highest bonus.

18. Display details of emp who is earing max salary.

Answer:

SELECT \* from Employee where Salary = (select max(Salary) from Employee);

Output:

| **Emp\_Code** | **FirstName** | **LastName** | **Salary** | **DOJ** | **Department** |
| --- | --- | --- | --- | --- | --- |
| 4 | Amrita | Prasad | 500000 | 2019-03-10 09:00:00 | Admin |
| 5 | Vidhi | Agarwal | 500000 | 2019-02-11 09:00:00 | Admin |
|  |  |  |  |  |  |

19. Print emp last name , dept , salary of employees who is

earing max salary in each department.

Answer:

select e1.LastName, e1.Department, e1.Salary from Employee e1 where e1.Salary > (select max(e2.Salary) from Employee e2 group by e2.Department having e1.Department=e2.Department);

20. Print emp details who is earning lowest salary.

Answer:

SELECT \* from Employee where Salary = (select min(Salary) from Employee);

Output:

| **Emp\_Code** | **FirstName** | **LastName** | **Salary** | **DOJ** | **Department** |
| --- | --- | --- | --- | --- | --- |
| 7 | Sravan | Kumar | 75000 | 2019-04-20 09:00:00 | Account |
|  |  |  |  |  |  |

21.Print the emp last name, job role and effective date for each employee.

Answer:

22. Print emp lastname.

Answer:

SELECT Lastname from Employee;

Output:

| **Lastname** |
| --- |
| Sripada |
| Verma |
| Rao |
| Prasad |
| Agarwal |
| Prasad |
| Kumar |
| Verma |
|  |

DB Fiddle – Crafted with ♥ by [Status200](https://www.status200.co.uk/) in the United Kingdom.