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BSCS

Database Lab-B

**Lab 5**

1. Write a query to display the name, department number, and department name for all

employees.

SELECT employees.FIRST\_NAME, departments.DEPARTMENT\_NAME, departments.DEPARTMENT\_ID FROM `employees` NATURAL JOIN departments

2. Create a unique listing of all jobs that are in department 30.

SELECT employees.JOB\_ID, employees.DEPARTMENT\_ID, jobs.JOB\_TITLE FROM employees NATURAL JOIN jobs WHERE employees.DEPARTMENT\_ID = 30

3. Write a query to display the employee name, department name, location ID, and city of all

employees who earn a commission.

SELECT first\_name , d.department\_name, location\_id, city from employees e join departments d using(department\_id) join locations l using(location\_id) where commission\_pct is not null;

4. Display the employee name and department name for all employees who have an *A* in their last

names.

SELECT concat(employees.FIRST\_NAME," ", employees.LAST\_NAME), departments.DEPARTMENT\_NAME FROM `employees` NATURAL JOIN departments WHERE employees.LAST\_NAME LIKE '%a'

5. Write a query to display the name, department number, and department name for all

employees who work in Seattle.

SELECT e.FIRST\_NAME, d.DEPARTMENT\_ID, d.DEPARTMENT\_NAME FROM employees e JOIN departments d USING (DEPARTMENT\_ID) JOIN locations WHERE CITY = 'Seattle'

6. Display the employee name and employee number along with their manager’s name and

manager number. Label the columns **Employee, Emp#, Manager,** and **Mgr#,** respectively.

SELECT e.FIRST\_NAME Employee, e.EMPLOYEE\_ID AS 'Emp#' , m.FIRST\_NAME Manager, m.EMPLOYEE\_ID 'Mag#' FROM employees e JOIN employees m on (e.MANAGER\_ID = m.EMPLOYEE\_ID)

7. Modify query # 6 to display all employees including King, who has no manager. Order the

results by the employee number.

SELECT e.FIRST\_NAME Employee, e.EMPLOYEE\_ID AS 'Emp#' , m.FIRST\_NAME Manager, m.EMPLOYEE\_ID 'Mag#' FROM employees e LEFT OUTER JOIN employees m on (e.MANAGER\_ID = m.EMPLOYEE\_ID)

8. Create a query that displays employee name, department numbers, and all the employees who

work in the same department as a given employee. Label the columns **Department, Employee,**

**Colleague.**

SELECT e.FIRST\_NAME, e.DEPARTMENT\_ID FROM employees e JOIN employees e2 ON (e.DEPARTMENT\_ID = e2.DEPARTMENT\_ID)

9. Create a query that displays the name, job title for all employees

SELECT concat( employees.FIRST\_NAME, ' ' , employees.LAST\_NAME), jobs.JOB\_TITLE FROM `employees` NATURAL JOIN jobs

10. Create a query to display the name, department\_name and hire date of all employees

SELECT concat(e.FIRST\_NAME,' ', e.LAST\_NAME), e.HIRE\_DATE, d.DEPARTMENT\_NAME FROM employees e NATURAL JOIN departments d

11. Write a query to display the name ( first name and last name ), salary, department id, job id for

those employees who works in the same designation as the employee works whose id is 169

SELECT concat(FIRST\_NAME, LAST\_NAME), JOB\_ID, DEPARTMENT\_ID, SALARY FROM `employees` WHERE EMPLOYEE\_ID = 169

**Lab 6**

1. Create the TEST\_DEPT table based on the following table instance chart.

|  |  |  |
| --- | --- | --- |
| Column Name | **ID** | **NAME** |
| Data type | NUMERIC | VARCHAR |
| Length | 7 | 25 |

Confirm that the table is created.

CREATE TABLE test\_dept(

ID numeric(7),

Name varchar(25)

);

DESC test\_dept

2. Populate the TEST\_DEPT table with data from the DEPT table. Include only columns that you

need.

INSERT INTO test\_dept (ID, Name) VALUES(4, 'NIgga')

3. Create the TEST\_EMP table based on the following table instance chart.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | **ID** | **LAST\_NAME** | **FIRST\_NAME** | **DEPT\_ID** |
| Data type | NUMERIC | VARCHAR | VARCHAR | NUMERIC |
| Length | 7 | 25 | 25 | 7 |

Confirm that the table is created.

[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/create-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/create-table.html) test\_emp (  E\_ID numeric (7), Last\_Name [varchar](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/string-types.html) (25), First\_name [varchar](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/string-types.html)(25) )

DESC test\_emp

4. Populate the TEST\_EMP table with data from the EMP table. Include only columns that you

need.

INSERT INTO test\_emp (E\_ID, Last\_Name, First\_name) VALUES (1, 'Smith', 'deborah')

5. Modify the TEST\_EMP table to allow for longer employee last names (length: 50). Confirm your

modification.

6. Create the EMPLOYEES2 table based on the structure of the EMP table. Include only the

EMPNO, ENAME, SAL, and DEPTNO columns. Name the columns in your new table ID,

EMP\_NAME, SALARY, and DEPT\_ID, respectively.

CREATE TABLE employee2(

ID numeric(4) NOT null,

Emp\_Name varchar(25) NOT null,

Salary numeric (8,2),

Dept\_ID numeric (3)

);

7. Create a complete copy of the TEST\_EMP table. Drop the TEST\_EMP table.

[CREATE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/create-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/create-table.html) copy\_test\_emp( cE\_ID numeric(4), cFirst\_Name [varchar](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/string-types.html)(25), cLast\_Name [varchar](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/string-types.html)(25), CONSTRAINT Uni\_ID UNIQUE (cE\_ID) )

[DROP](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/drop-table.html) [TABLE](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/drop-table.html) test\_emp

8. Rename the EMPLOYEES2 table as MY\_EMP.

Rename Table employee2 To MY\_EMP

9. Drop the FIRST\_NAME column from the TEST\_EMP table. Confirm your modification by

checking the description of the table.

Alter Table test\_emp Drop Column First\_name

DESC test\_emp

10. Give yourself enough practice of altering tables by using all the options of the ALTER TABLE

statement on the TEST\_EMP, and TEST\_DEPT tables.