



Bahria University, Islamabad

Department of Software Engineering

Database Management

Systems Lab (Spring-2025)

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Enrollment : 01-131232-089

Assignment: 02

Date: 16th Feb 2025

Task No:	Task Wise Marks		Documentation Marks		Total Marks (20)
	Assigned	Obtained	Assigned	Obtained	
1	3		5		
2	3				
3	3				
4	3				
5	3				

Comments:

Signature

LAB No: 02-> Basic Categories of SQL Statements

Tools Used:

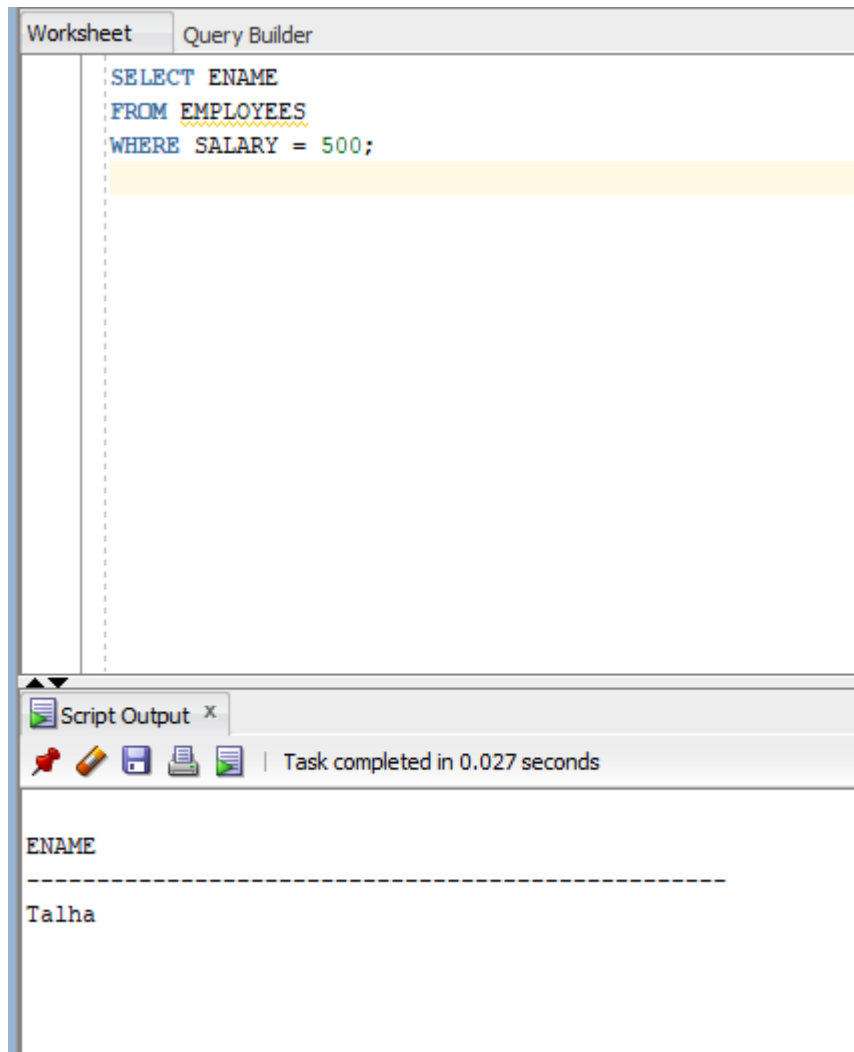
- SQL Developer Tools
- GitHub
- Link to Repository: <https://github.com/TALHA-089/DBMS-LAB-02.git>

	❖ COLUMN_NAME	❖ DATA_TYPE	❖ NULLABLE	DATA_DEFAULT	❖ COLUMN_ID	❖ COMMENTS
1	EMPNO	NUMBER(5,0)	No	(null)	1	Employee number (unique identifier)
2	ENAME	VARCHAR2(50 BYTE)	No	(null)	2	Employee name
3	JOB	VARCHAR2(30 BYTE)	Yes	(null)	3	Employee job title
4	MGR	NUMBER(5,0)	Yes	(null)	4	Manager employee number (self-reference)
5	HIREDATE	DATE	Yes	(null)	5	Hire date of the employee
6	SALARY	NUMBER(10,2)	No	(null)	6	Salary of the employee
7	COMM	NUMBER(10,2)	Yes	(null)	7	Commission amount (optional)
8	DEPTNO	NUMBER(5,0)	Yes	(null)	8	Department number (links to DEPT)

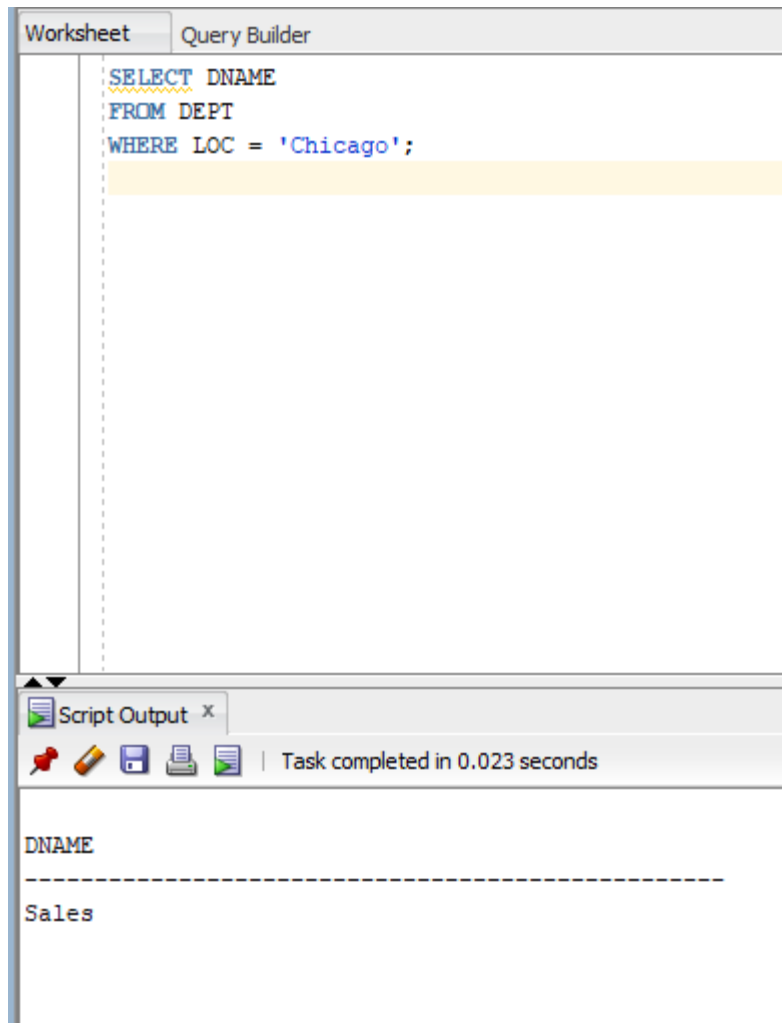
TASKS:

1. Display employees' names whose salary is 500 from EMP table

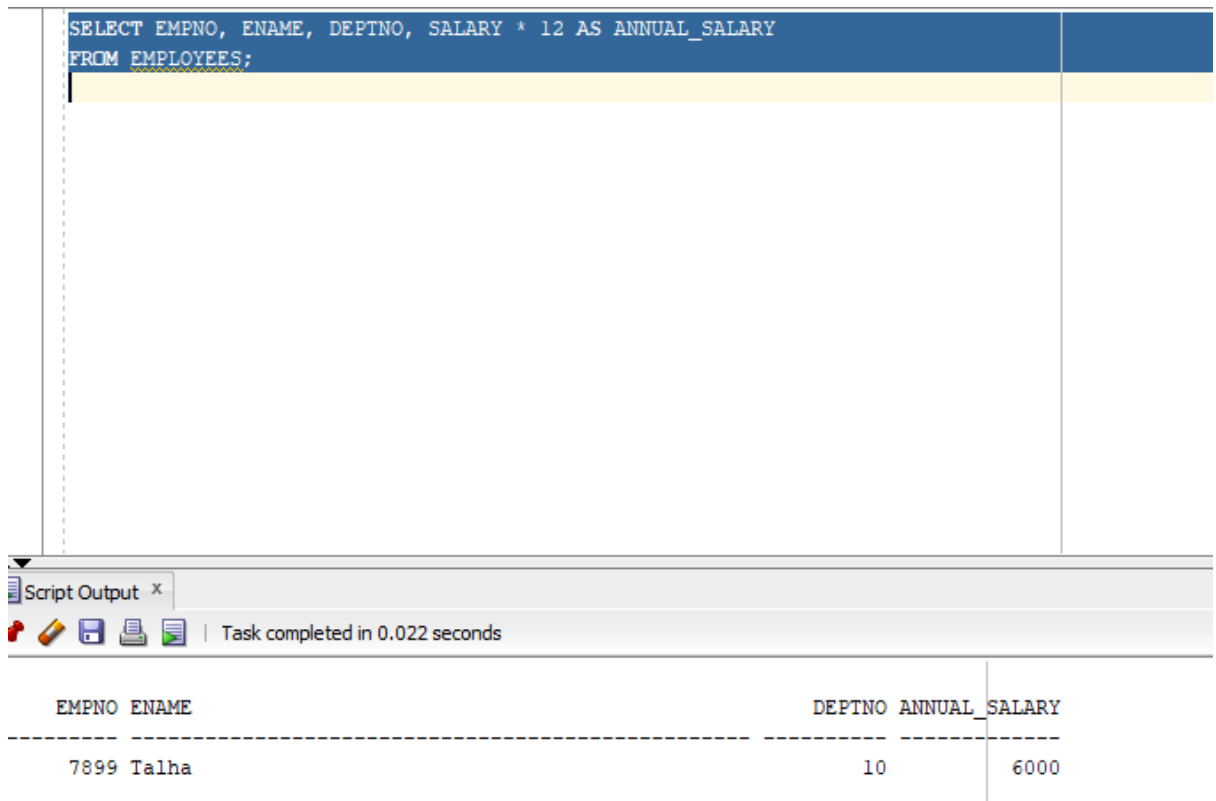
Hint: Use Where clause



2. Select dname from DEPT table where location is (chose any location of your choice from the table)



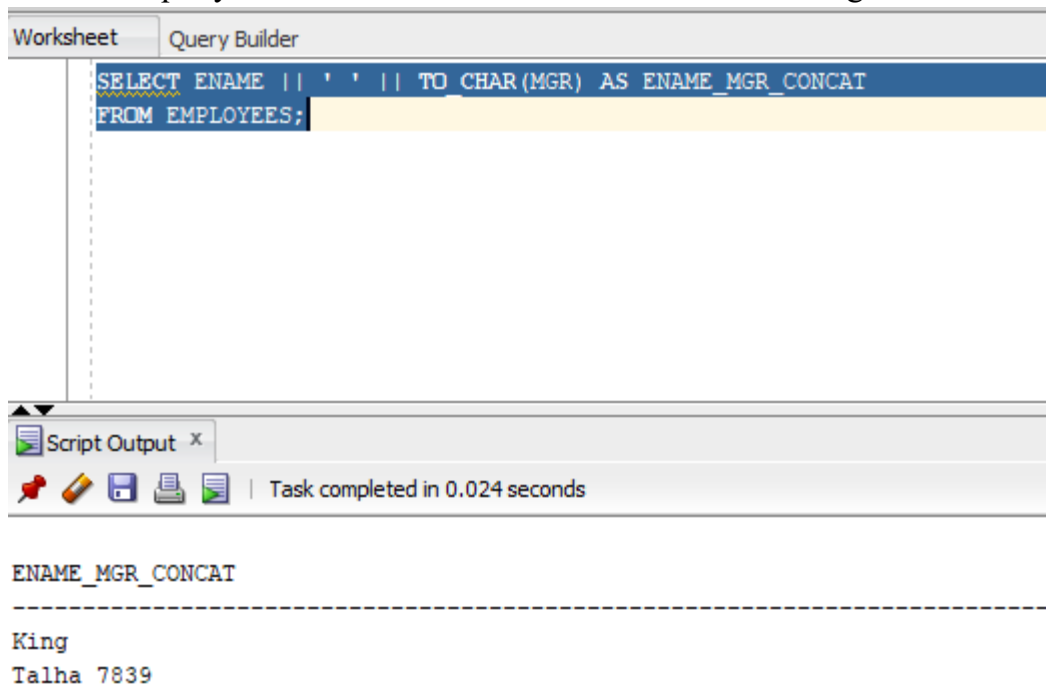
3. Increment the salary of each employee 10 times and then display the annual salary along with emp#, employee names and dept# from EMP table
Hint: Use multiplication operator



The screenshot shows a database query editor with a SQL query in the top pane and its output in the bottom pane. The query is: `SELECT EMPNO, ENAME, DEPTNO, SALARY * 12 AS ANNUAL_SALARY FROM EMPLOYEES;`. The output pane shows a table with four columns: EMPNO, ENAME, DEPTNO, and ANNUAL_SALARY. The data row shows EMPNO 7899, ENAME Talha, DEPTNO 10, and ANNUAL_SALARY 6000. The output pane also includes a status bar indicating the task completed in 0.022 seconds.

EMPNO	ENAME	DEPTNO	ANNUAL_SALARY
7899	Talha	10	6000

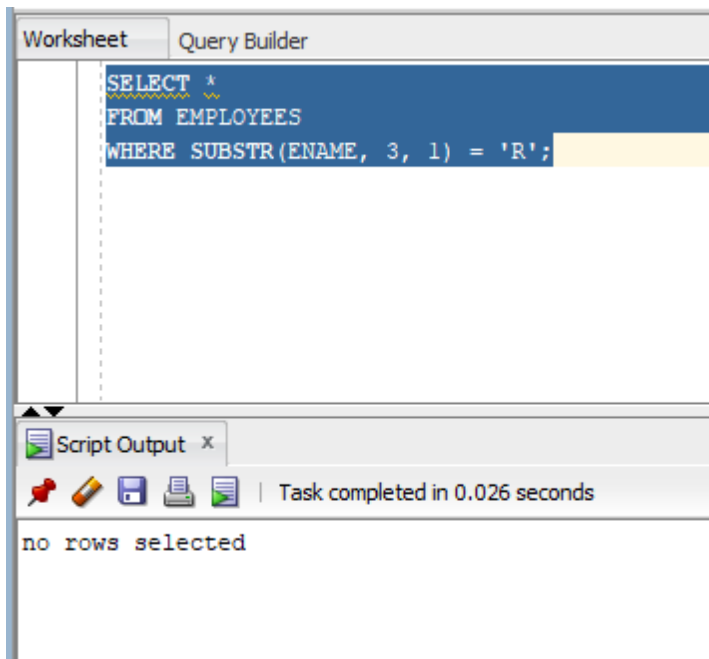
4. Execute a query to concatenate the columns of ename and mgr from EMP table



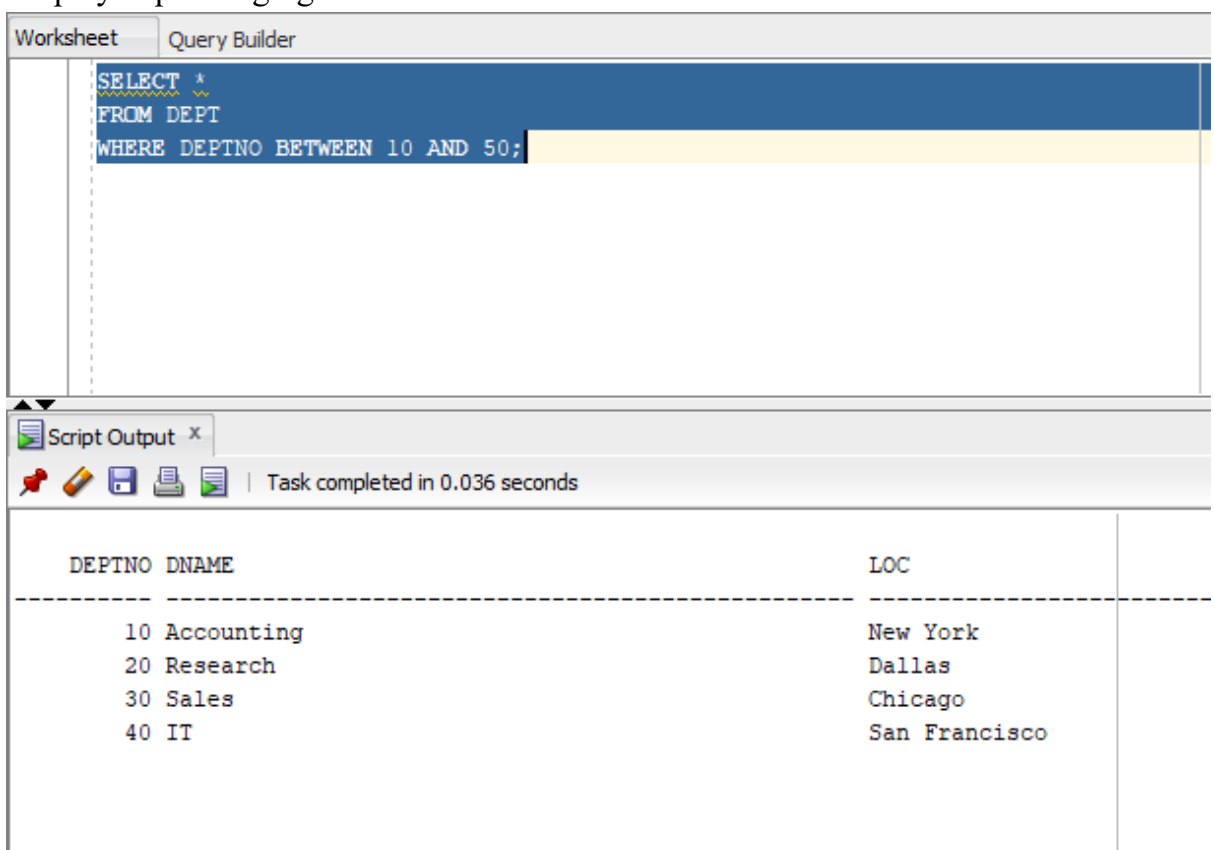
The screenshot shows a database query editor with a SQL query in the top pane and its output in the bottom pane. The query is: `SELECT ENAME || ' ' || TO_CHAR(MGR) AS ENAME_MGR_CONCAT FROM EMPLOYEES;`. The output pane shows a table with one column: ENAME_MGR_CONCAT. The data row shows ENAME_MGR_CONCAT King. The output pane also includes a status bar indicating the task completed in 0.024 seconds.

ENAME_MGR_CONCAT
King

5. Select those data rows where 3rd character of ename is “R” from EMP table



6. Display dept# ranging between 10 and 50 from DEPT table








7. Perform sorting in EMP table to display latest hired employee at first
Hint: Use **ORDER BY** clause

Worksheet

Query Builder

SELECT *
FROM EMPLOYEES
ORDER BY HIREDATE DESC;

Script Output x



Task completed in 0.033 seconds


EMPNO	ENAME	JOB	MGR	HIREDATE	SALARY	COMM	DEPTNO
12346	Talha	Developer	7839	13-FEB-25	4500	1500	30
7839	King	President		01-JAN-22	5000	2000	10





8. Sort emp# in descending order and salary in ascending order WHERE the deptno is 10

Worksheet

Query Builder

```
SELECT *  
FROM EMPLOYEES  
WHERE DEPTNO = 10  
ORDER BY EMPNO DESC, SALARY ASC;
```

 Script Output x

    | Task completed in 0.03 seconds

EMPNO	ENAME	JOB	MGR	HIREDATE	SALARY	COMM	DEPTNO
7839	King	President		01-JAN-22	5000	2000	10