

LABORATORY NOTE BOOK

MAKAUT ODD SEMESTER 2024



[MASTER OF COMPUTER APPLICATION]

[RELATIONAL DATABASE MANAGEMENT SYSTEM LAB (MCAN192)]

[RUPAK SARKAR]

ROLL NO: 14271024036

REGN. NO.: 241420510045

STREAM: MCA

SEMESTER: I (1ST)

YEAR: 1ST Year

SESSION: 2024-2026





MEGHNAD SAHA INSTITUTE OF TECHNOLOGY

Techno Complex,. Madurdaha,Beside NRI Complex, Post-Uchhepota, Kolkata 700 150

“LIST OF ASSIGNMENT/EXPERIMENT SUBMISSION DETAILS”

SL. NO.	ASSIGNMENT / EXPERIMENT NAME	DATE OF EXPERIMENT	DATE OF SUBMISSION	CHECKED BY	REMARKS (ANY DEVIATION REGARDING SUBMISSION DATES, CONTENT, FORMAT, ETC)

OBSERVATIONS / COMMENTS ON THE OVERALL PERFORMANCE:

Signature in full with date

Faculty / Technical Assistant

Signature in full with date

Lab Examiner

Q. Create a table called EMP with the following structure:

(EMP_NO, E_ADDRESS, E_PH_NO, DEPT_NO, DEPT_NAME, JOB_ID, DESIGNATION, SALARY)

Ans: To create the abovementioned table, we write the following command –

SQL Query – CREATE TABLE EMPLOYEE2(EMP_NO NUMBER(5), E_NAME CHAR(15), E_ADDRESS VARCHAR2(30), E_PH_NO NUMBER(10), DEPT_NO NUMBER(5), DEPT_NAME VARCHAR2(10), JOB_ID VARCHAR2(10), DESIGNATION VARCHAR2(15), SALARY NUMBER(10,2), HIRE_DATE DATE);

Object Type **TABLE** Object **EMPLOYEE2**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
<u>EMPLOYEE2</u>	<u>EMP_NO</u>	NUMBER	-	5	0	-	✓	-	-
	<u>E_NAME</u>	CHAR	15	-	-	-	✓	-	-
	<u>E_ADDRESS</u>	VARCHAR2	30	-	-	-	✓	-	-
	<u>E_PH_NO</u>	NUMBER	-	10	0	-	✓	-	-
	<u>DEPT_NO</u>	NUMBER	-	5	0	-	✓	-	-
	<u>DEPT_NAME</u>	VARCHAR2	10	-	-	-	✓	-	-
	<u>JOB_ID</u>	VARCHAR2	10	-	-	-	✓	-	-
	<u>DESIGNATION</u>	VARCHAR2	15	-	-	-	✓	-	-
	<u>SALARY</u>	NUMBER	-	10	2	-	✓	-	-
	<u>HIRE_DATE</u>	DATE	7	-	-	-	✓	-	-
									1 - 10

Q.1. List the E_no, E_name, Salary of all employees working for MANAGER.

Ans: To list the E_no and E_name, we need to write the following query.

SQL Query – SELECT EMP_NO, E_NAME, SALARY FROM EMPLOYEE2 WHERE (DESIGNATION='MANAGER');

Results			Explain	Describe	Save
EMP_NO	E_NAME	SALARY			
105	NARUTO	50000			
106	LUFFY	50000			

2 rows returned in 0.00 seconds

Q.2. Display all the details of the employee whose salary is more than the Sal of any IT PROFF.

Ans: To display all the details of the employee whose salary is more than the Sal of any IT Proff, we need to write the following query.

SQL Query – SELECT * FROM EMPLOYEE2 WHERE SALARY>(SELECT MAX(SALARY) FROM EMPLOYEE2 WHERE DESIGNATION='ITPROFF');

Results Explain Describe Saved SQL History

EMP_NO	E_NAME	E_ADDRESS	E_PH_NO	DEPT_NO	DEPT_NAME	JOB_ID	DESIGNATION	SALARY	HIRE_DATE
108	KILLUA	KOREA	9452259806	108	SALES	108	CLERK	60000	01/25/2001
114	ASTER	USA	8918420787	112	IT	114	PRESIDENT	200000	01/01/1970

2 rows returned in 0.00 secondsDownload

Q.3. List the employees in the ascending order of Designations of those joined after 1981.

Ans: To list the employees in the ascending order of Designations of those joined after 1981, we need to write the following query.

SQL Query – SELECT * FROM EMPLOYEE2 WHERE HIRE_DATE>'01/01/1981' ORDER BY DESIGNATION;

Results	Explain	Describe	Saved SQL	History					
EMP_NO	E_NAME	E_ADDRESS	E_PH_NO	DEPT_NO	DEPT_NAME	JOB_ID	DESIGNATION	SALARY	HIRE_DATE
113	HOROLOGIUM	AUSTRALIA	9658420787	111	IT	113	ADMIN	11000	11/07/2001
100	RUPAK	KOLKATA	9433558306	100	IT	100	ADMIN	50000	06/12/2002
109	ASHLEY	USA	9658423652	109	ACCOUNTS	109	CASHIER	9900	05/01/1981
110	LORELEI	USA	9658423676	20	ACCOUNTS	110	CASHIER	9900	05/01/2005
101	SAYAN	KOLKATA	9433552406	101	ACCOUNTS	101	CASHIER	5000	07/11/2002
102	CHIRU	KOLKATA	9435552406	102	IT	102	CLERK	5000	07/21/2002
112	HYSILENS	AUSTRALIA	9658420751	110	SALES	112	CLERK	5600	11/10/2009
108	KILLUA	KOREA	9452259806	108	SALES	108	CLERK	60000	01/25/2001
103	SUBRATA	KOLKATA	9435525406	103	SALES	103	CLERK	5000	07/21/2002
111	ADLER	AUSTRALIA	9658420176	10	SALES	111	CLERK	5600	11/10/2008
107	NATSU	KOREA	9452252506	107	IT	107	ITPROFF	50000	01/25/2001
106	LUFFY	JAPAN	9452262606	106	DEVELOPER	106	MANAGER	50000	02/25/2002
105	NARUTO	KOLKATA	9452265406	105	DEVELOPER	105	MANAGER	50000	02/15/2002
104	SUDIPTA	KOLKATA	9452265406	104	HR	104	RECRUITER	50000	04/15/2002
14 rows returned in 0.00 seconds			Download						

Ans: To list the employees along with their Experience and Daily Salary, we need to write the following query:

SQL Query – SELECT E_NAME, (SYSDATE-HIRE_DATE)/365 AS EXPERIENCE, (SALARY/30) AS DAILY_SALARY FROM EMPLOYEE2;

Q.5. List the employees who are either 'CLERK' or 'ANALYST'.

Ans: To list the employees who are either 'CLERK' or 'ANALYST', we need to write the following query:

SQL Query – SELECT * FROM EMPLOYEE2 WHERE DESIGNATION=('CLERK') OR DESIGNATION=('ANALYST');

5 rows returned in 0.00 seconds [Download](#)

Q.6. List the employees who joined on 1-MAY-81, 3-DEC-81, 17-DEC-81,19-JAN-80.

Ans: To list the employees who joined on 1-MAY-81, 3-DEC-81, 17-DEC-81,19-JAN-80, we need to write the following query:

SQL Query – SELECT * FROM EMPLOYEE2

WHERE HIRE_DATE IN (

TO_DATE('01-05-1981', 'DD-MM-YYYY'),

TO_DATE('03-12-1981', 'DD-MM-YYYY'),

TO_DATE('17-12-1981', 'DD-MM-YYYY'),

TO_DATE('19-01-1980', 'DD-MM-YYYY')

);

Results Explain Describe Saved SQL History

EMP_NO	E_NAME	E_ADDRESS	E_PH_NO	DEPT_NO	DEPT_NAME	JOB_ID	DESIGNATION	SALARY	HIRE_DATE
109	ASHLEY	USA	9658423652	109	ACCOUNTS	109	CASHIER	9900	05/01/1981

1 rows returned in 0.01 seconds

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Q.7. List the employees who are working for the Dept_no 10 or 20.

Ans: To list the employees who are working for the Dept_no 10 or 20, we need to write the following query:

SQL Query – SELECT * FROM EMPLOYEE2 WHERE DEPT_NO IN (10, 20);

Results Explain Describe Saved SQL History

EMP_NO	E_NAME	E_ADDRESS	E_PH_NO	DEPT_NO	DEPT_NAME	JOB_ID	DESIGNATION	SALARY	HIRE_DATE
111	ADLER	AUSTRALIA	9658420176	10	SALES	111	CLERK	5600	11/10/2008
110	LORELEI	USA	9658423676	20	ACCOUNTS	110	CASHIER	9900	05/01/2005

2 rows returned in 0.00 seconds

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Q.8. List the E_names those are starting with 'S'.

Ans: To list the E_names those are starting with 'S', we need to write the following query:

SQL Query – SELECT E_NAME FROM EMPLOYEE2 WHERE E_NAME LIKE 'S%';

Results	Explain	Describe	Sav
E_NAME			
SAYAN			
SUBRATA			
SUDIPTA			

3 rows returned in 0.00 seconds

Q.9. Display the name as well as the first five characters of name(s) starting with 'H'.

Ans: To display the name as well as the first five characters of name(s) starting with 'H', we need to write the following query:

SQL Query – SELECT E_NAME, SUBSTR(E_NAME, 1, 5) AS FIRST_FIVE_CHARS FROM EMPLOYEE2 WHERE E_NAME LIKE 'H%';

Results	Explain	Describe	Saved SQL	Hist
E_NAME	FIRST_FIVE_CHARS			
HYSILENS	HYSIL			
HOROLOGIUM	HOROL			

2 rows returned in 0.01 seconds [Download](#)

Q.10. List all the emps except 'PRESIDENT' & 'MGR' in asc order of Salaries.

Ans: To list all the emps except 'PRESIDENT' & 'MGR' in asc order of Salaries, we need to write the following query:

SQL Query – SELECT * FROM EMPLOYEE2 WHERE DESIGNATION NOT IN ('PRESIDENT', 'MGR') ORDER BY SALARY ASC;

EMP_NO	E_NAME	E_ADDRESS	E_PH_NO	DEPT_NO	DEPT_NAME	JOB_ID	DESIGNATION	SALARY	HIRE_DATE
103	SUBRATA	KOLKATA	9435525406	103	SALES	103	CLERK	5000	07/21/2002
102	CHIRU	KOLKATA	9435552406	102	IT	102	CLERK	5000	07/21/2002
101	SAYAN	KOLKATA	9433552406	101	ACCOUNTS	101	CASHIER	5000	07/11/2002
111	ADLER	AUSTRALIA	9658420176	10	SALES	111	CLERK	5600	11/10/2008
112	HYSILENS	AUSTRALIA	9658420751	110	SALES	112	CLERK	5600	11/10/2009
110	LORELEI	USA	9658423676	20	ACCOUNTS	110	CASHIER	9900	05/01/2005
109	ASHLEY	USA	9658423652	109	ACCOUNTS	109	CASHIER	9900	05/01/1981
113	HOROLOGIUM	AUSTRALIA	9658420787	111	IT	113	ADMIN	11000	11/07/2001
107	NATSU	KOREA	9452252506	107	IT	107	ITPROFF	50000	01/25/2001
106	LUFFY	JAPAN	9452262606	106	DEVELOPER	106	MANAGER	50000	02/25/2002

More than 10 rows available. Increase rows selector to view more rows.

10 rows returned in 0.00 seconds [Download](#)