Write SQL Queries for Exercise-I and Exercise-II given below. Execute them and provide the answers.

Data For Employee Table

FName	Minit	LName	SSN	BDate	Address	Sex	Salary	SuperSSN	DepNo
Doug	E	Gilbert	554433221	09-JUN-60	11 S 59 E, Salt Lake City, UT	M	80000	NULL	3
Joyce		PAN	543216789	07-FEB-78	35 S 18 E, Salt Lake City, UT	F	70000	NULL	2
Frankin	T	Wong	333445555	08-DEC-45	638 Voss, Houston, TX	M	40000	554433221	5
Jennifer	S	Wallace	987654321	20-JUN-31	291 Berry, Bellaire, TX	F	43000	554433221	4
John	B	Smith	123456789	09-JAN-55	731 Fondren, Houston, TX	M	30000	333445555	5
Ramesh	K	Narayan	666884444	15-SEP-52	975 Fire Oak, Humble, TX	M	38000	333445555	5
Joyce	A	English	453453453	31-JUL-62	5631 Rice, Houston, TX	F	25000	333445555	5
James	E	Borg	888665555	10-NOV-27	450 Stone, Houston, TX	M	55000	543216789	1
Alicia	J	Zelaya	999887777	19-JUL-58	3321 Castle, Spring, TX	F	25000	987654321	4
Ahmad	V	Jabbar	987987987	29-MAR-59	980 Dallas, Houston, TX	M	25000	987654321	4

Data For Department table

DName	DepNo	MgrSSN	MgrStartDate
Manufacture	1	888665555	19-JUN-71
Administration	2	543216789	04-JAN-99
Headquarter	3	554433221	22-SEP-55
Finance	4	987654321	01-JAN-85
Research	5	333445555	22-MAY-78

Data For Project

PName	PNumber	Plocation	DepNo
ProjectA	3388	Houston	1
ProjectB	1945	Salt Lake City	3
ProjectC	6688	Houston	5
ProjectD	2423	Bellaire	4
ProjectE	7745	Sugarland	5
ProjectF	1566	Salt Lake City	3
ProjectG	1234	New York	2
ProjectH	3467	Stafford	4
ProjectI	4345	Chicago	1
ProjectJ	2212	San Francisco	2

Exercise-I:

1. Insert the data given above in both employee, department and project tables.
2. Display all the employees' information.
3. Display Employee name along with his SSN and Supervisor SSN.
4. Display the employee names whose bdate is '29-MAR-1959'.
5. Display salary of the employees without duplications.
6. Display the MgrSSN, MgrStartDate of the manager of 'Finance' department.
7. Modify the department number of an employee having fname as 'Joyce' to 5
8. Alter Table department add column DepartmentPhoneNum of NUMBER data type and insert values into this column only.
9. Alter table department to modify the size of DepartmentPhoneNum.
10. Modify the field name DepartmentPhoneNum of departments table to PhNo.
11. Rename Table Department as DEPT.
12. Alter Table department remove column PhNo.
13. Create a table COPYOFDEPT as a copy of the table DEPT.
14. Delete all the rows from COPYOF DEPT table.
15. Remove COPYOF DEPT table.

Exercise: II

Operators and Functions

Aim: To understand different operators and types of function in SQL

Execute the following queries based on the schema specified in exercise 1

1. Find the employee names having salary greater than Rs.25000.
2. Find the employee names whose salary lies in the range between 30000 and 70000.
3. Find the employees who have no supervisor.
4. Display the bdate of all employee s in the format 'DDthMonthYYYY'.
5. Display the employee names whose bdate is on or before 1978.
6. Display the employee names having 'salt lake' in their address.
7. Display the department name that starts with 'M'.
8. Display the department names' that ends with 'E'.
9. Display the names of all the employees having supervisor with any of the following SSN 554433221, 333445555.
10. Display all the department names in upper case and lower case.
11. Display the first four characters and last four of the department names using substring function.
12. Display the substring of the Address (starting from 5th position to 11 th position) of all employees.
13. Display the Mgrstartdate on adding three months to it.
14. Display the age of all the employees rounded to two digits.
15. Find the last day and next day of the month in which each manager has joined.
16. Print a substring from the string 'Harini'.
17. Replace the string 'ni' from 'Harini' by 'sh'.
18. Print the length of all the department names.
19. Print the system date in the format 25 th May 2007.
20. Display the date after 10 months from current date.
21. Display the next occurrence of Friday in this month.

22. Convert SSN of employee to Number format and display.

23. Display the project location padded with **** on left side.

24. Remove the word 'Project' from the project name and display it.

25. Select the SSN of the employee whose dependent name is either Michaelor Abner.