SI. N	Name of the Experiment	List of Expe	riments		Pag e No	
° 1	Database Management and Table Operations in SQL, including creating and deleting databases, creating tables with specific schemas, inserting data, displaying data, and create table from another tables.	 Create a database named as aecitdb Create another database named as tempdb Delete the database tempdb Enter into the database named as aecitdb Create a table named as TempPerson with the following Schema TempPerson (Pid, FirstName, LastName, City, DOB, Salary) (Data Types of the attributes can be selected by your own choice) Create a table named as Person with the following Schema Person (Pid, FirstName, LastName, City, DOB, Salary) (Data Types of the attributes should be as follows: Pid> it should be Integer in nature FirstName, LastName, City> It should be String in nature DOB> It should be Date in nature Insert the following data in the Person table. 101—Amal—Biswas—Asansol—12/08/1972—90000.89 102—Tamal—Choudhury—Kolkata—15/02/1992—40000.58 103—Rita—Sen—Durgapur—12/08/1986—60000.36 Show all the data present in the Table, Person. 				
2	Database 4 Cuesto a table your die ITEM with the fallewing on a factor					
	Modification, and Data Insertion in SQL, Constraints specifications		Integer in nature String with maximum 20 characters Decimal in nature Integer in nature table named as DUMMY_ITE	Primary Key, values within 1 to 1000 Cannot be null, will be in UPPERCASE Should be within 1.00 to 25.95 Should not be less than 1 M_1 with the same		
	specifications as of ITEM. 3. Create a table named as DUMMY_ITEM_2 with the same specifications as of ITEM but attributes names will be as follow I_no > Item_no , I_name > Item_name, I_price > Item_price, I_qty > Item_quantity 4. Drop the Primary key from ITEM table. 5. Add the Primary Key in the ITEM table. 6. Create a table named as CUSTOMER with the following specifications.					

Attribute Name		Data Types		Constraints			
Cust_no		Integer in nature		Empty cell value not Possible unique value		ot Possible,	
Cust_name		String with		not null, uppercase			
_		maximum 20					
		char	acters				
State		Strin	g with		values must be wi		hin 'WB',
		maximum character		r	'UP', 'AP	', default v	alue is 'WB'
'. Insert	. Insert the following data into the			ne I T	r EM table	9	
	I_	no	I_name		I_price	I_qty	
	_		_				

l_no	I_name	I_price	l_qty
1	Sword	2.25	50
2	Nut	5.00	110
3	Bolt	3.99	75
4	Hammer	9.99	125
5	Washer	1.99	100
6	Nail	0.99	300
7	Axe	3.55	25
8	Scissor	2.19	15

8. Insert the following data into the **CUSTOMER** table

Cust_no	Cust_name	State
1001	Prakash	UP
1002	Mukesh	AP
1003	Murti	UP
1004	Rajan	WB

9. Using SELECT and INSERT together populate the **DUMMY_ITEM_2** table from **ITEM** table.

SQL Queries 3 on tables ITEM and CUSTOMER, including displaying item and customer details, filtering based on conditions, searching for specific items, and sorting results.

Using the following tables perform the following queries:

ITEM(I_no, I_name,I_price,I_qty)

CUSTOMER(Cust_no,Cust_name,State)

- 1. Display details of all items
- 2. Display details of all customers from 'UP'.
- 3. Display details of the customer 'Prakash'.
- 4. Display all customers who are either from 'AP' or from 'WB'.
- 5. Display all customers who are not from 'UP'.
- 6. Display the details of item 'Nail'.
- 7. Find all items whose price lies between 2 and 6.
- 8. Find all items whose price does not lie between 2 and 6.
- 9. Find all items whose price is greater than 1.00 but quantity is less than 200.
- 10. Find all items which have 'o' in their names.
- 11. Find all items which starts with 'A'
- 12. Find all items which ends with 'r'
- 13. Sort all customers in descending order of their states.

Database Modification and Table Management in SQL, involving updating data, altering table structure, adding and removing columns, changing column names, displaying constraints, truncating data, and deleting tables.

Using the following tables perform the following queries:

ITEM(I_no, I_name,I_price,I_qty)

CUSTOMER(Cust_no,Cust_name,State)

- 1. Change I_qty to 75 of I_no 1.
- 2. Change the I_price of 'Nut' to 6.
- 3. Increase the Item price by 10%.
- 4. Delete all items whose quantity is 500.
- 5. Delete all items those prices lie between 0.1 and 1.00.
- 6. Add a column "Phone_no number (10)" to **CUSTOMER** table.
- 7. Change the size of the newly added column to 15.
- 8. Change the name of **Phone_no** attribute to **Ph_number**
- 9. Remove the **Ph_number** attribute from the table
- 10. Change the name of **CUSTOMER** to **CUSTOMER_YourName**.
- 11. Change the name of ITEM to ITEM YourName.
- 12. Display the all the constraints of ITEM_YourName table.
- 13. Truncate all data from CUSTOMER_YourName
- 14. Display all data from CUSTOMER_YourName
- 15. Remove the tables **CUSTOMER_YourName**, **ITEM_YourName**, **DUMMY_ITEM** from the database.

Database Management and SQL Queries on **EMPLOYEE** and **DEPARTMEN** T tables, involving table creation. foreign key relationships, data population, and various SELECT queries to retrieve specific information from the tables with Join operations.

1. Create a table named as **EMPLOYEE** with the following specifications

Name	Туре
EMPNO	NUMBER (4), Primary Key
ENAME	VARCHAR2(10)
JOB	VARCHAR2(9)
MGR	NUMBER(4),
HIREDATE	DATE
SAL	NUMBER(7,2)
СОММ	NUMBER(7,2)
DEPTNO	NUMBER(2)

- 2. Make the **DEPTNO** of EMPLOYEE table as a foreign key of **DEPARTMENT** table.
- Create a table named as **DEPARTMENT** with the following specifications

Name	Type
DEPTNO	NUMBER(2),
DNAME	VARCHAR2(14), NOT NULL
LOC	VARCHAR2(13), NOT NULL

4. Make the DEPTNO of **DEPARTMENT** table as a Primary key.

5. Populate the **EMPLOYEE** table with the following data

ENO	ENAME	JOB	MGR	HIREDATE	SAL	сомм	DEPTNO
7369	Smith	Clerk	7902	17-Dec-88	1000		20
7499	Allen	Salesman	7698	20-Feb-89	1600	300	30
7521	Ward	Salesman	7698	22-Feb-89	1250	500	30
7566	Jones	Manager	7839	02-Apr-89	2975		20
7654	Marti	Salesman	7698	28-Sep-89	1250	1400	30
7698	Blake	Manager	7839	01-May- 89	2850		30
7782	Clark	Manager	7839	09-Jun-89	2450		10
7788	Wong	Analyst	7566	19-Apr-87	3000		20
7839	King	President		17-Nov-89	5000		10
7844	Turn	Salesman	7698	08-Sep-89	1500	0	30
7876	Adam	Clerk	7788	23-May- 87	1100		20
7900	James	Clerk	7698	03-Dec-89	950		30
7902	Ford	Analyst	7566	03-Dec-89	3000		20
7934	Mille	Clerk	7782	23-Jan-86	1300		10

6. Populate the **DEPARTMENT** table with the following data

DEPTNO	DNAME	LOC
10	HRD	Houston
20	RESEARCH	Dallas
30	SALES	Chicago
40	OPERATION	Boston

- 7. Display the name, deptno, dname for all employees.
- 8. Create a unique listing of all jobs that are in deptno 30. Include the location of dept 30 in the output.
- 9. Display the employee's name, dept name and the location of all employees who earn a commission.
- 10. Display the employee's name, dept name for all employees who have an 'A' in their name.

SQL Queries
on
DEPARTMEN
T and
EMPLOYEE
tables,
including
retrieving
employee
details based
on location,
displaying
hierarchical
information,

modifying

Using the following tables perform the following queries:

DEPARTMENT (DEPTNO, DNAME, LOC)

EMPLOYEE (ENO,ENAME,JOB,MGR,HIREDATE,SAL,COMM,DEPTNO)

- 1. Display the employee name, job, deptno, dept name for all employees who work in DALLAS.
- 2. Display the employee name, empno along with their manager's name and manager no.
- 3. Modify the previous query,2, to display all employees including king, who has no manager.

	queries to	4.	Display the employee's name of all the employees that work in the	
	include		same DEPTNO as a given employee.	
	specific employees,	5.	Display the employee's name, job, dept name, salary, and grade for all	
	comparing		employees.	
	hire dates,	6.	Display the employee's name, and hire date of any employee hired	
	finding	0.	after BLAKE.	
	salary-	_		
	related	7.	Display the employee's name, and hire date along with their	
	information		manager's name and hire date of all employees hired before their	
	such as the		manager.	
	second and	8.	Find the second highest salary from emp table.	
	fifth highest	9.	Find the fifth highest salary from emp table.	
	salaries.	٦.		
7	SQL Queries on		Using the following tables perform the following queries:	
•	DEPARTMEN		DEPARTMENT (DEPTNO, DNAME, LOC)	
	T and		EMPLOYEE (ENO, ENAME, JOB, MGR,HIREDATE,SAL,COMM,DEPTNO)	
	EMPLOYEE			
	tables,	1.	List the names of analysts and salesmen.	
	including	2.	List details of employees who have joined before 30 Sep 81.	
	filtering		• • • • • • • • • • • • • • • • • • • •	
	based on job	3.	List names of employees who are not managers.	
	titles, date of	4.	List the names of employees whose employee numbers are	
	joining,		7369,7521, 7839,7934, 7788.	
	managerial	5.	List employees not belonging to department 30, 40, or 10.	
	status, specific	6.	List employee names for those who have joined between 30 June and	
	employee		31 Dec. '81.	
	numbers,	7.	List the different designations in the company.	
	department			
	membership,	8.	List the names of employees who are not eligible for commission.	
	name	9.	List the name and designation of the employee who does not report	
	patterns, and		to anybody.	
	calculating	10.	List the employees not assigned to any department.	
	various	1	List the employees who are eligible for commission.	
	statistics like	1	List employees whose names either start or end with "S".	
	the total number of	1	• •	
	employees,	13.	List names of employees whose names have "i" as the second	
	number of		character.	
	designations,	14.	List the number of employees working with the company.	
	total salaries,	15.	List the number of designations available in the EMP table.	
	and specific	1	List the total salaries paid to the employees.	
	salary details.	1	List the maximum, minimum and average salary in the company.	
		1	List the maximum salary paid to a salesman.	
		10.	LIST THE HIANHHUM SAIALY PAIN TO A SAIESHIAM.	
	Various		Using the following tables perform the following averies:	
8	queries		Using the following tables perform the following queries:	
	performed		DEPARTMENT (DEPTNO, DNAME, LOC)	
	on employee		EMPLOYEE (ENO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO)	
	and			
	department	1.	List the number of employees and average salary for employees in	
	tables		department 20.	
	including	2.	List name, salary and PF amount of all employees. (PF is calculated as	
	calculations	۷.	• • • • • • • • • • • • • • • • • • • •	
	of employee		10% of basic salary)	
	count,	3.	List names of employees who are more than 2 years old in the	
	average salary, PF		company.	
	amount,	4.	List the employee details in the ascending order of their basic salary.	
	tenure,	5.	List the employee's name and hire date in the descending order of the	
	department-]	hire date.	
	wise		inic date.	

statistics, 6. List employee name, salary, PF, HRA, DA and gross; order the results sorting, and in the ascending order of gross. HRA is 50% of the salary and DA is additional 30% of the salary. salary 7. List the department numbers and number of employees in each components department. 8. List the department number and total salary payable in each department. 9. List the jobs and number of employees in each job. The result should be in the descending order of the number of employees. 10. List the total salary, maximum and minimum salary, and average salary of the employees' job wise. 11. List the total salary, maximum and minimum salary, and average salary of the employees, for department 20. 12. List the total salary, maximum and minimum salary, and average salary of the employees' job wise, for department 20 and display only those rows having an average salary > 1000 Various Using the following tables perform the following queries: 9 aueries **DEPARTMENT (DEPTNO, DNAME, LOC)** performed **EMPLOYEE** (ENO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO) on employee and department 1. Display the details of the employees whose commission is NULL. tables 2. Display employee's name and sal+comm. And give the heading including Total Salary. filtering, 3. Display the name and increased salary (20% increases) of each formatting output, manager. salary 4. Display the output in following format for each Salesman: calculations, Mr. <Employee's name>'s total earning is (sal+comm). date display, 5. Display today's date in following format: Today's date is <date>. 24th aggregate functions, 2021, June subqueries, 6. Display min and max salaries among all employees and rename the and deletions fields accordingly. with associated 7. Display details of all employees along with their dept name in the actions. ascending order of hiredate. 8. Display min, max, average, and total salaries of each dept in ascending order of deptname. 9. Display name of the department and number of employees in which at least 4 employees work on. 10. Display emp name whose salary is higher than the average salary of all the employees having 5 letters in their name. 11. Display details of all employees whose deptname is either SALES or HRD (deptname should be supplied by user using sub query). 12. Display name of the location where Wong is working. 13. While deleting RESEARCH department of DEPT, it automatically deletes all the corresponding employees of that dept. 14. Display the details of top 3 earners. 15. Display each employee's name and their corresponding manager's 16. Modify previous query, 15, to include the record of King in the output. 10

11		
12		