Lab sheet 4
PMDS506P Database Management systems.

Q1. Create a table EMPLOYEES with the attributes EMPNO, NAME, JOB, HIREDATE, SAL, DEPTID and populate it with the following data.

7369	SMITH	CLERK	17-DEC-19	800	20
7499	ALLEN	SALESMAN	20-FEB-19	1600	30
7521	WARD	SALESMAN	22-FEB-19	1250	30
7566	JONES	MANAGER	02-APR-19	2975	20
7654	MARTIN	SALESMAN	28-SEP-19	1400	30
7698	BLAKE	MANAGER	01-MAY-19	2850	30
7782	CLARK	MANAGER	09-JUN-19	2450	10
7788	SCOTT	ANALYST	19-APR-19	3000	20
7839	KING	PRESIDENT	17-NOV-19	5000	10

1) Find the minimum salary being given by the company.
2) Find the maximum salary given by the company.
3) Find the average salary being given by the company.
4) Find the total count of all the employees.
5) Find the total salary of all the employees.
6) Find the variance of the salary of the employees and display it.
7) Find the total salary of all the employees of each department (Hint : consider dept_id).
8) Find the average salary of all the employees of each department (Hint : consider dept_id).
9) Find the count of the employees in each job type where the salary >1000.
10) Find the department id whose total number of employees is greater than 3.
11) Find the next Monday of the hiredates of the employees who are clerks.

Q2. Create the following table named as sailors, and answer the following.

Sailor_id	Name	Rating	Age	Salary
1	Dustin	7	45	2345.645
2	Rusty	10	35	1345.763
3	Horatio	5	35	3456.726
4	Zorba	8	18	5400.003
5	Julius	5	25	34123.888

a) List ratings and ages of all the sailors.
b) List the distinct ratings among all the sailors.
c) Find the name of all the sailors who are over 21 years old.
d) Find the names and ratings of the sailors whose age is between 30 to 50.
e) Write a query to round the salary of each sailor to the nearest whole number.
f) Write a query to truncate the salary of each sailor to two decimal places.
g) Write a query to find the square of the ratings of the sailors and display it along with their names.
h) Write suitable query to display all sailors with even numbered sailor id.
i) Write an SQL query to find the latest date from the two dates, 11-05-1988 and 12-06-1989.
j) Write three SQL query to round of the date 12/05/2023 16:47:00 to the nearest date, month and year formats separately.
k) Find the number of months between the two dates 23-05-1985 and 24-11-2020.
l) Write a query to display the remainder when each sailors's salary is divided by 100.
m) Change all lower-case letters in the names of the sailors to uppercase and display
Ans: UPDATE sailors SET name = UPPER (name);
n) Find the sailor with the longest name using SQL query.
o) Concatenate the name and age of a sailors and display the results.

Q3. From the table created in Q1,

a) Create a view Empview with the columns name salary and deptno.
b) Create a view Empview 1 in read only mode.
c) Add a tuple to your view Empview and Empview1 and check the outputs.
d) Check the table EMPLOYEES whether the tuple you added to Empview is added or not.
e) Delete tuples from the view Empview where deptno is 20;
f) Modify the tuple with name Allen as Sahrikh in the view Empview.