Experiment No. 02

Experiment Name: - Ret rival Commands-I

Aim: - Performing practical by using restricting, sorting conditions and single-row functions.

Resource required: - Oracle 9i - iSQLplus

Theory: -

RESTRICTING DATA:

Limiting the Rows Selected:

Syntax:-

```
SELECT *| {[DISTINCT] column / expression [alias],….}
FROM   table
[WHERE    condition(s)];
```

Restrict the rows returned by using the WHERE clause

Example:

```
SELECT employee_id, last_name, job_id, department_id
FROM employees
WHERE depertment_id = 90;
```

Comparison Conditions

1)
```
SELECT last_name, salary
 FROM employees
WHERE salary<= 3000;
```

2) **BETWEEN Condition:** display row based on a range of values

```
SELECT last_name, salary
FROM employees
WHERE salary BETWEEN 2500 AND 3500;
```

3) **IN Condition:** test for values in a list

```
SELECT employee_id, last_name, salary, manager_id
FROM employees
WHERE manager_id IN (100,101,201);
```

4) **LIKE Condition:** Combine pattern-matching character

```
SELECT last_name
FROM employees
WHERE last_name LIKE '_o%';
```

Logical Conditions

5) **AND & OR operator:**

```
SELECT employee_id, last_name, job_id, salary
FROM employees
WHERE (job_id = 'SA_REP'
OR   job_id = 'AD_PRES')
AND salary> 15000;
```

6) **NOT operator:**

```
SELECT last_name, job_id
FROM employees
WHERE job_id
NOT IN ('IT_PROG', 'ST_CLERK', 'SA_REP');
```

SORTING DATA:

ORDER BY Clause: Sort rows

```
SELECT employee_id, last_name, salary*12 annsal
FROM employees
ORDER BY annsal;
```

NULL Keyword:

NULL is a value.

SINGLE ROW FUNCTIONS:

Character Function
Number Function
Date Function
Conversion Function
General Function

Character-Manipulation Functions

CONCAT(str1, str2)
LENGTH (str)
INSTR (str,' <finding character>')
SUBSTR (str, <index in string>)
INITCAP(str)

Example:

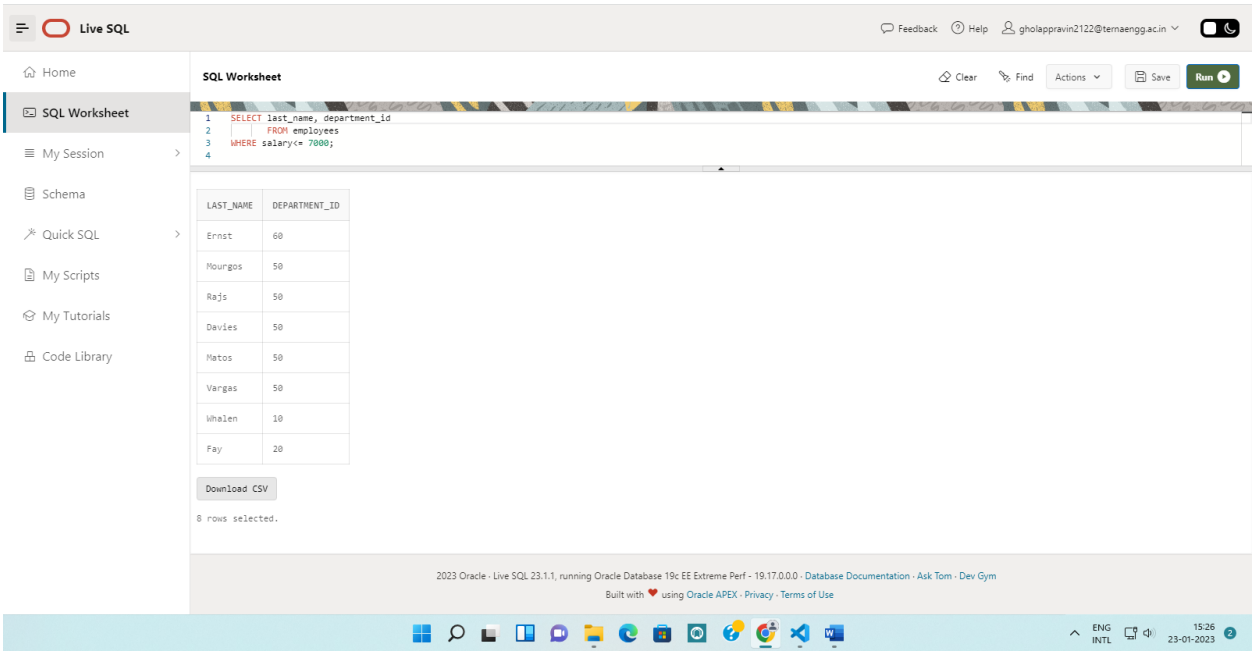
```
SELECT employee_id, CONCAT (first_name, last_name) NAME,
Job_id, LENGTH (last_name), INITCAP(first_name)
INSTR (last_name, 'a') "Contains 'a'?"
FROM employees
WHERE SUBSTR (job_id, 4) = 'REP';
```

Subject: Database Management system Lab	Experiment No: 2
Roll. No.: C05	Name: Tavishaa Jaiswal
Class: SE-C	Batch: C1
Date of Experiment:	Date of Submission:
Grade:	

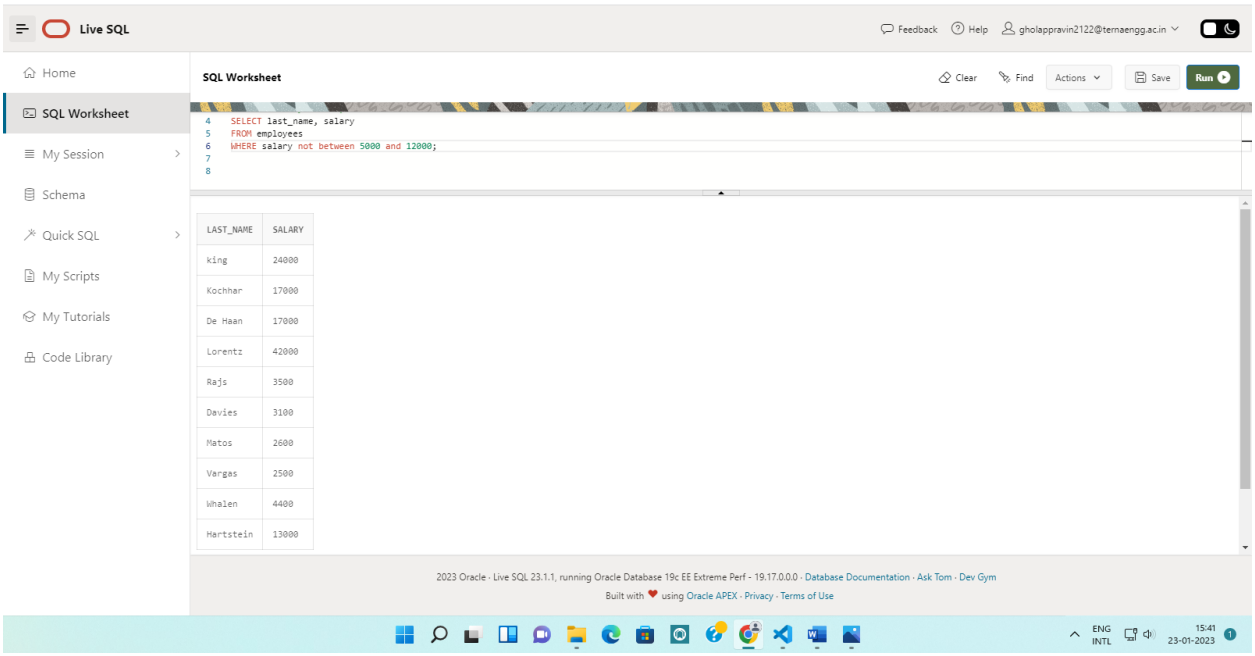
Lab Assignment No-02

(Paste your code completed during the 2 hours of practical in the lab here)

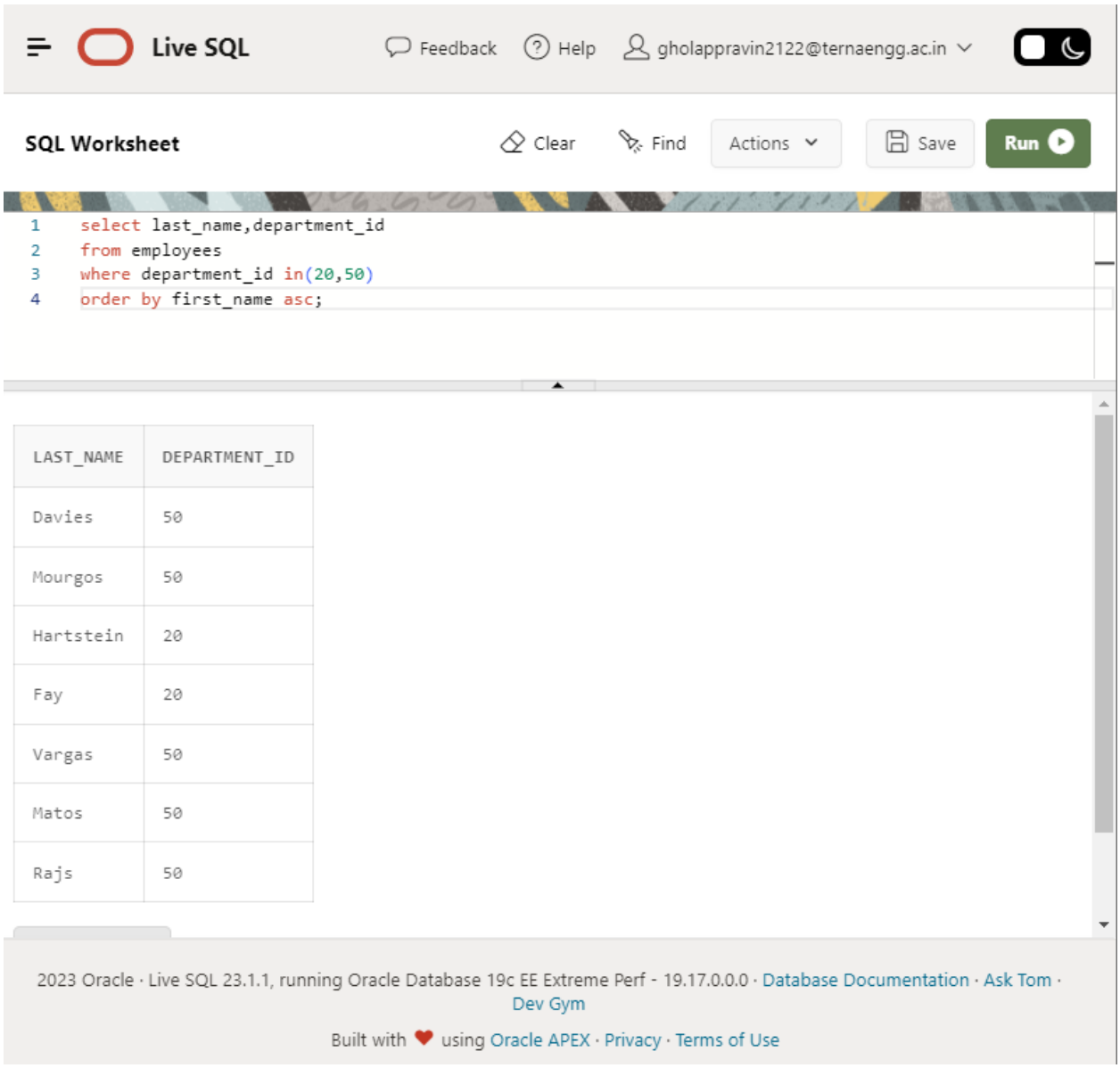
1. Create a query to display the last_name, department_id of all employees whose salary is greater than $7000.



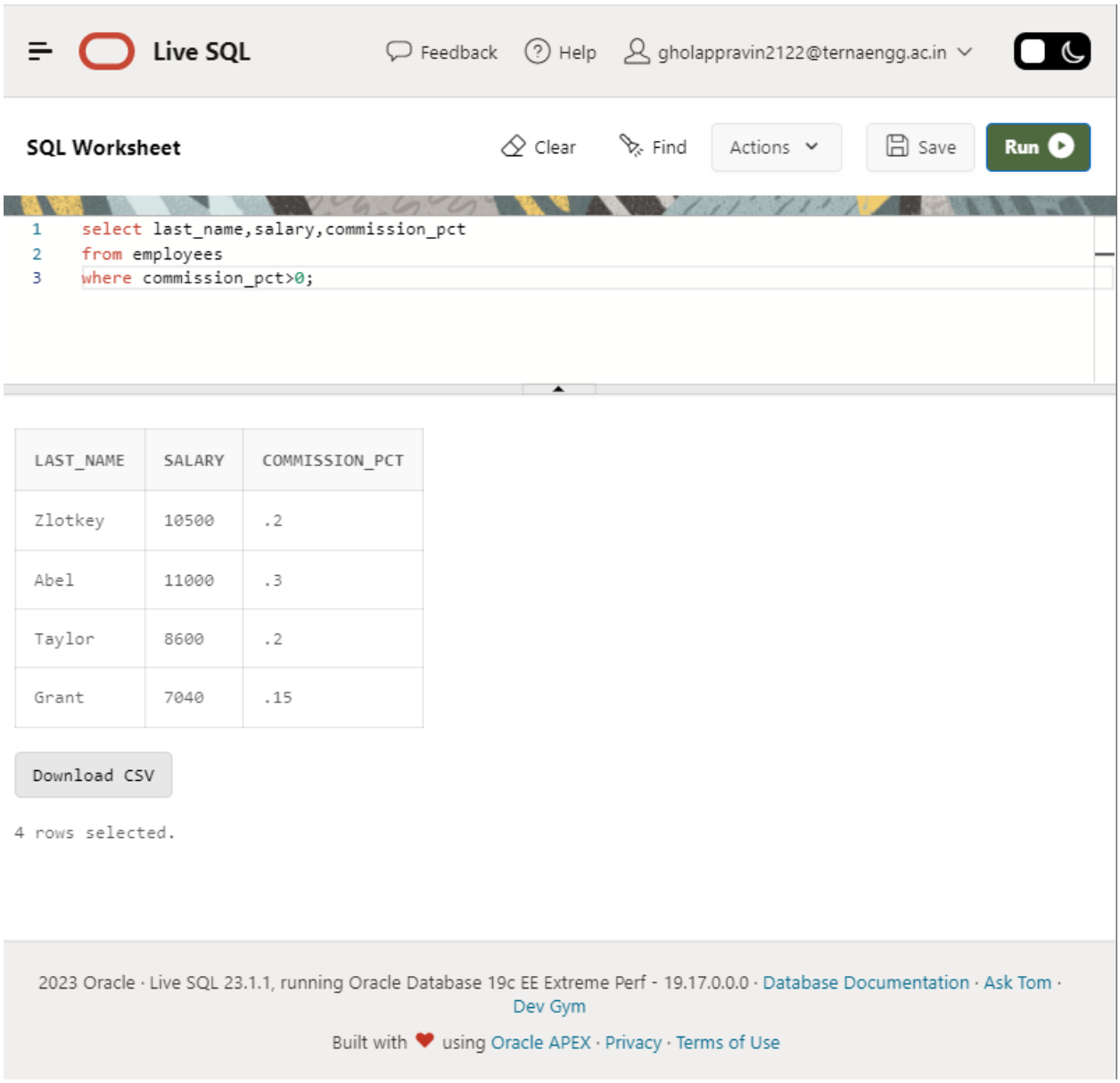
2. Create a query to display the last_name and salary for all employees whose salary is not in the range of $5,000 and $12,000. Order the output in descending order by last_name.



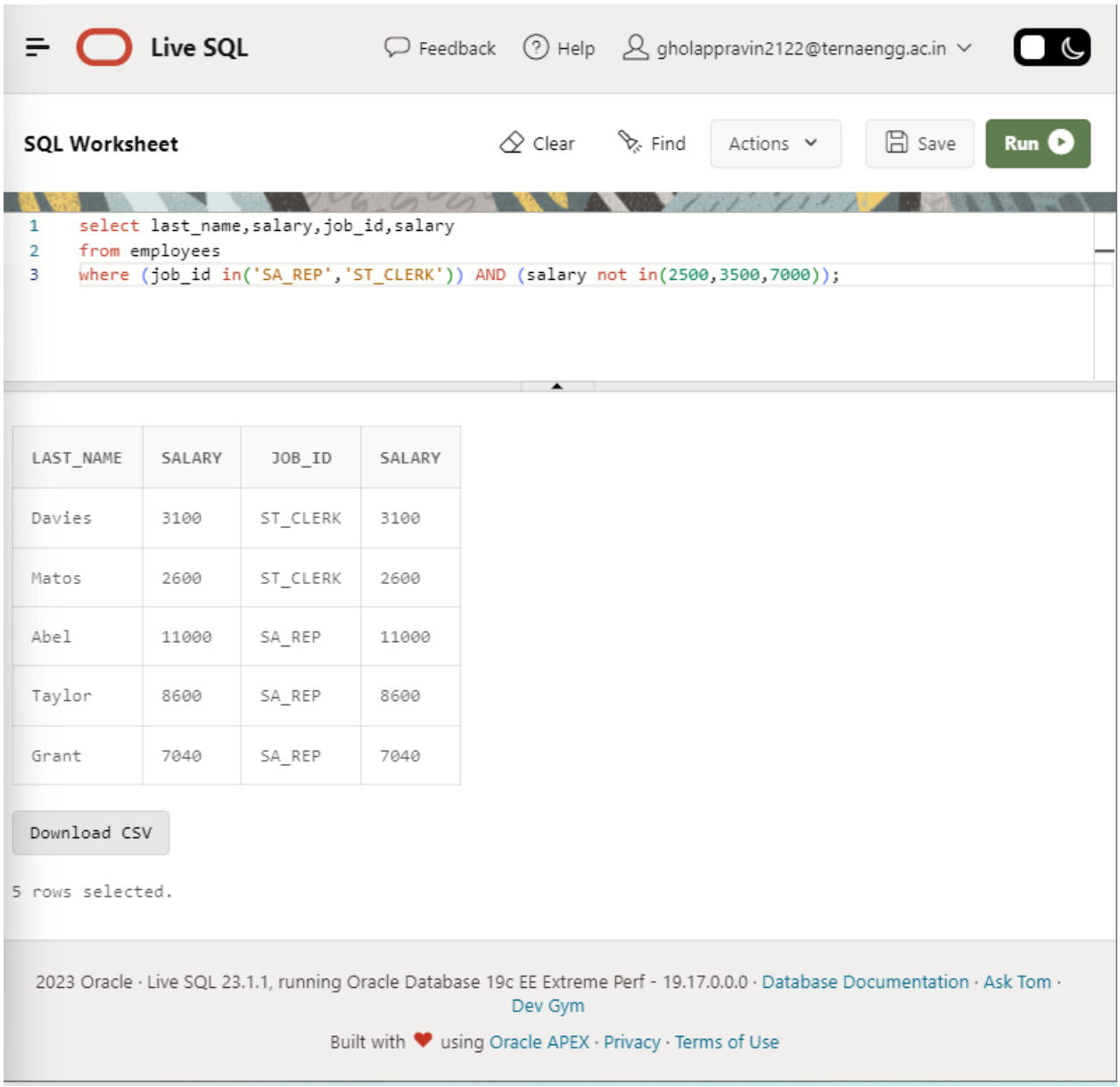
3. Display the last_name and department number of all employees in departments 20 and 50 in alphabetical order by name. (Make use of the IN clause.)



4. Display the last_name, salary, and commission for all employees who earn commissions.



5. Display the last name, job, and salary for all employees whose job is Sales Representative (SA_REP) or Stock Clerk (ST_CLERK) and whose salary is not equal to $2, 500, $3,500, or $7,000. Make use of the IN clause.



6. Write a query that displays the employee's last names with the first letter capitalized and all other letters lowercase, and length of the names, for all employees whose name starts with J,A, or M.