

Class Test 02

PL/SQL

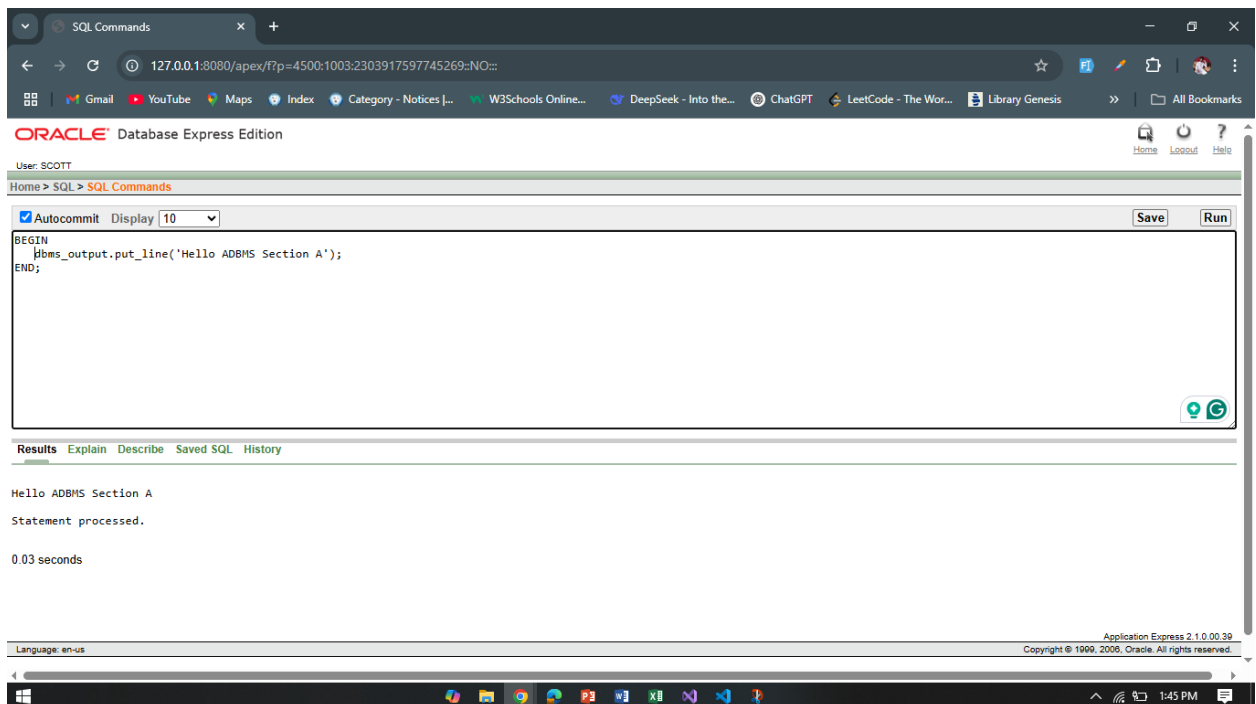
Part 01:

1. Write a query that displays **Hello ADBMS Section A** using the concept of literal.

Answer: BEGIN

```
dbms_output.put_line('Hello ADBMS Section A');  
END;
```

Output:



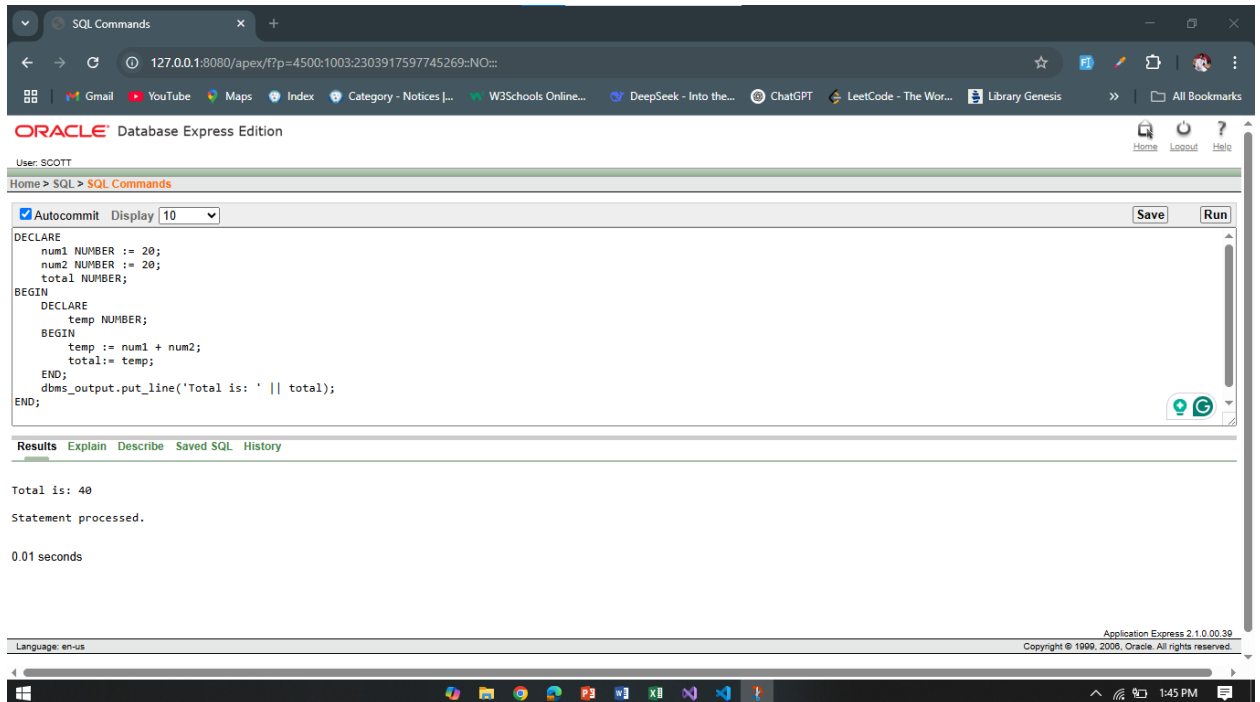
2. Write a query that can add two numbers using the concept of inner block and outer block.

Answer:

```
DECLARE  
  num1 NUMBER := 20;  
  num2 NUMBER := 20;  
  total NUMBER;  
BEGIN  
  DECLARE  
    temp NUMBER;  
  BEGIN  
    temp := num1 + num2;  
    total:= temp;
```

```
END;  
dbms_output.put_line('Total is: ' || total);  
END;
```

Output:

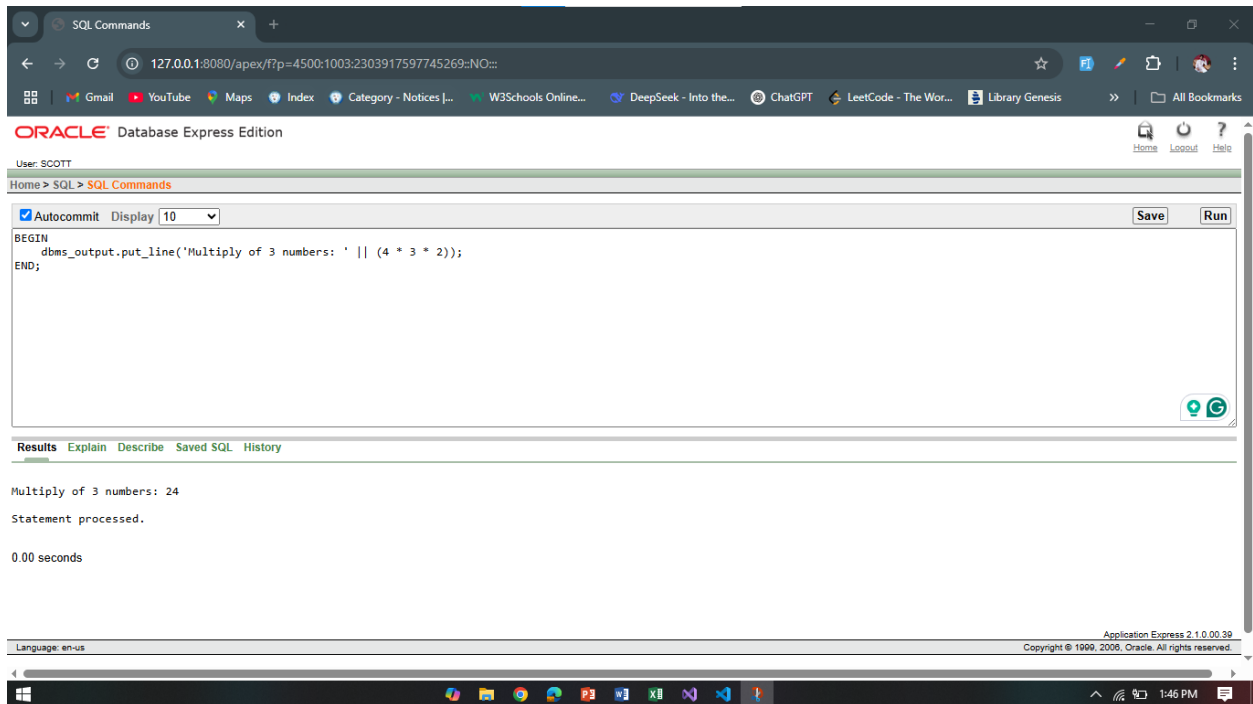


3. Write a query that can multiply three numbers using the concept of literal.

Answer:

```
BEGIN  
  dbms_output.put_line('Multiply of 3 numbers: ' || (4 * 3 * 2));  
END;
```

Output:

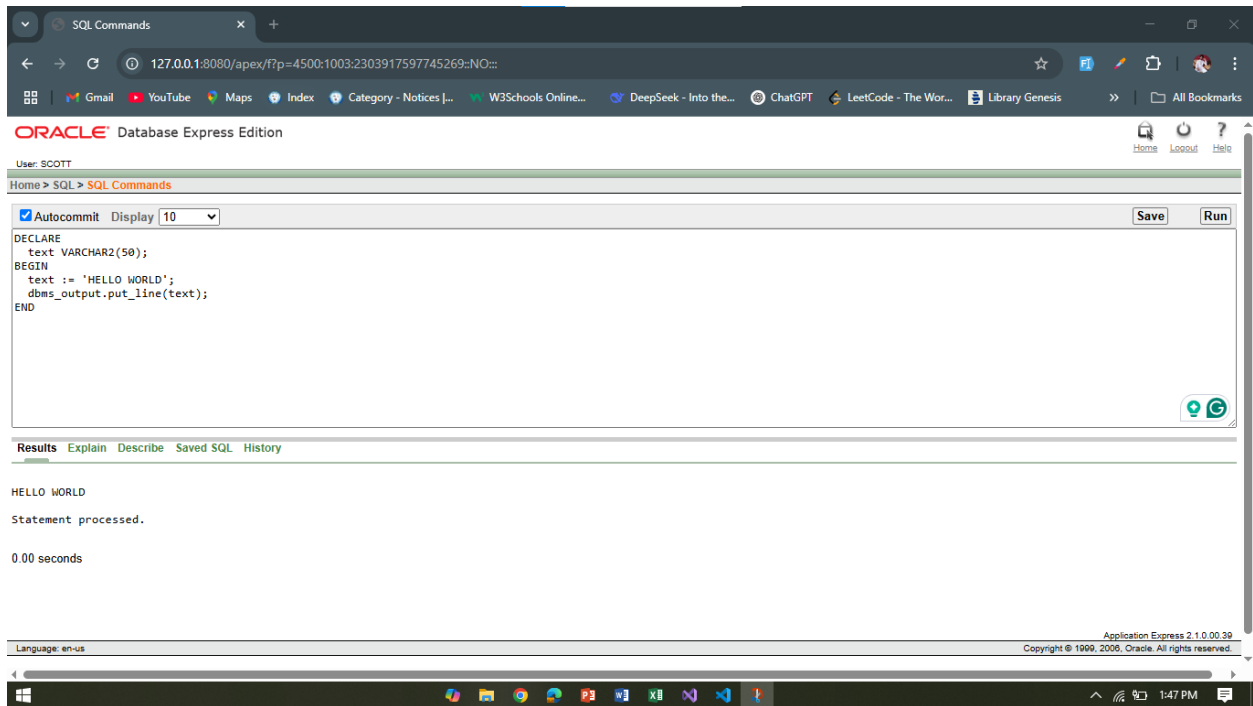


4. Write a query that stores **Hello World** in a variable and displays it in block letters.

Answer:

```
DECLARE
  text VARCHAR2(50);
BEGIN
  text := 'HELLO WORLD';
  dbms_output.put_line(text);
END
```

Output:

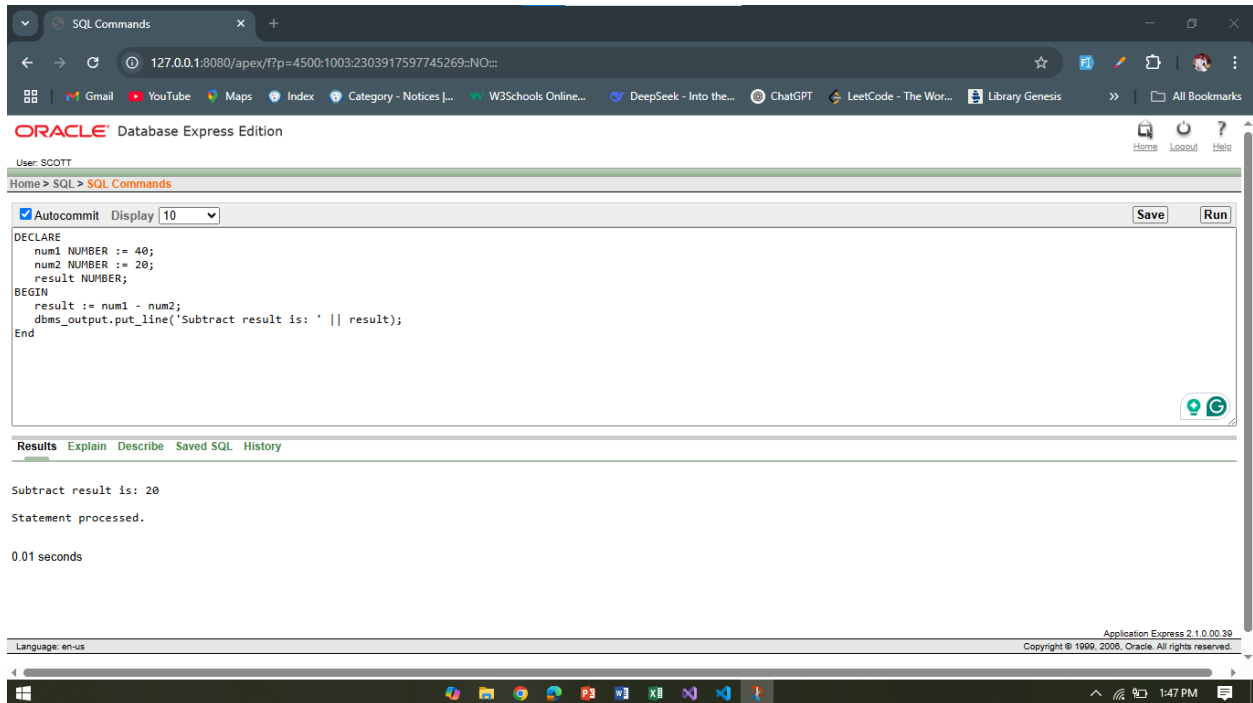


5. Write a query that can subtract a smaller number from a larger number and display the result using the concept of variable.

Answer:

```
DECLARE
  num1 NUMBER := 40;
  num2 NUMBER := 20;
  result NUMBER;
BEGIN
  result := num1 - num2;
  dbms_output.put_line('Subtract result is: ' || result);
End
```

Output:

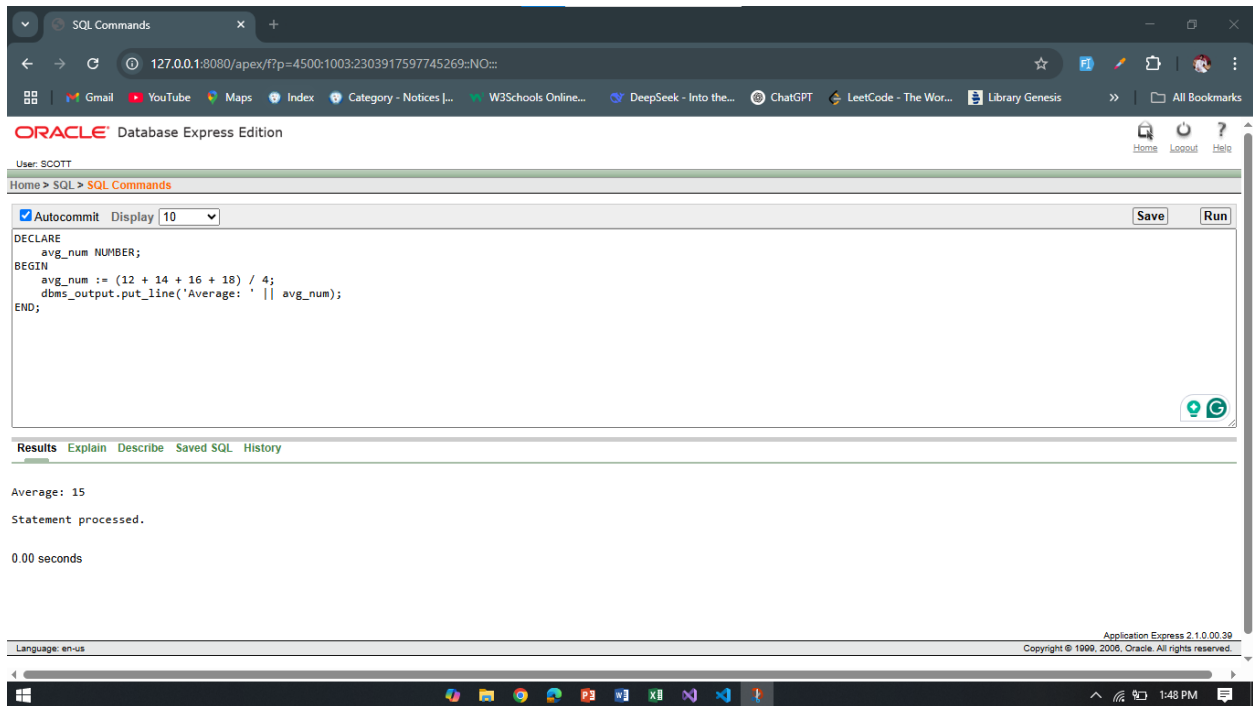


6. There are four numbers given i.e. 12,14,16,18. Find out the average.

Answer:

```
DECLARE
    avg_num NUMBER;
BEGIN
    avg_num := (12 + 14 + 16 + 18) / 4;
    dbms_output.put_line('Average: ' || avg_num);
END;
```

Output:

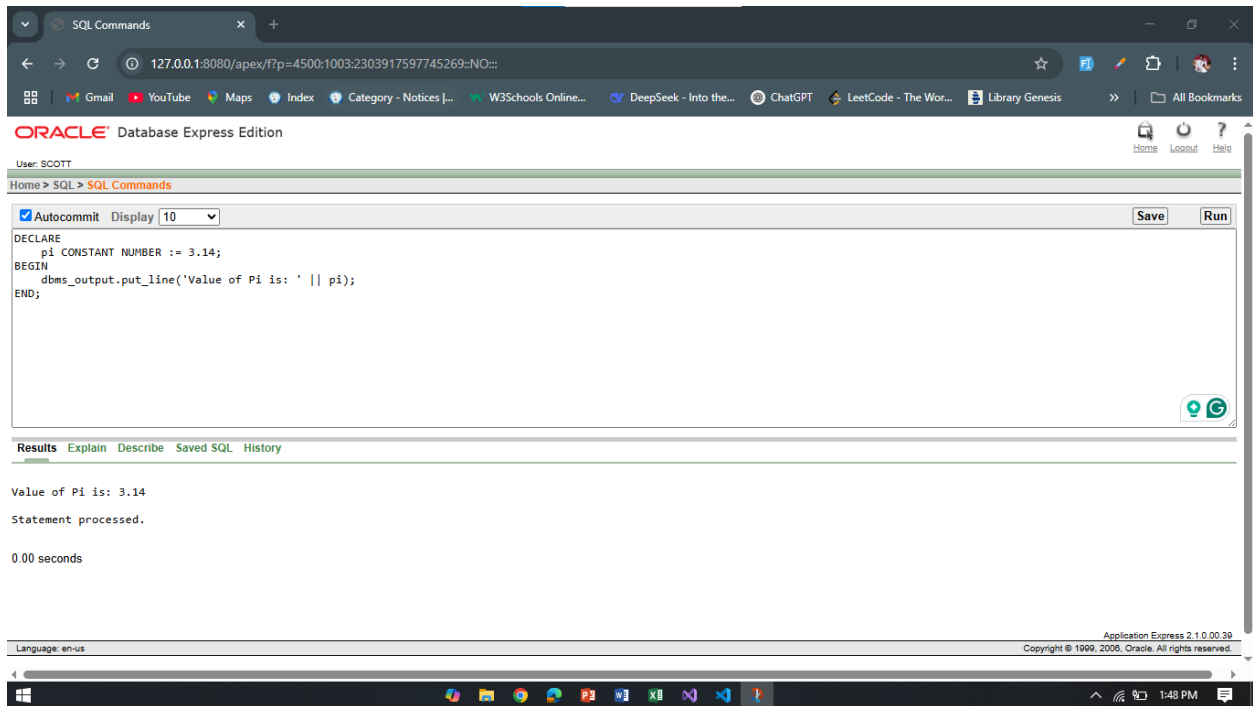


- Write a query that displays the value of pi using the concept of constant.

Answer:

```
DECLARE
  pi CONSTANT NUMBER := 3.14;
BEGIN
  dbms_output.put_line('Value of Pi is: ' || pi);
END;
```

Output:



Part 02:

To solve the following use the scott schema

1. Write a query that can display the name of the department which has department number 10.

Answer: SELECT dname FROM dept WHERE deptno = 10;

Output:

The screenshot shows the Oracle Database Express Edition interface. The SQL Commands window contains the query: `SELECT dname FROM dept WHERE deptno = 10;`. The results are displayed in a table with one row: `DNAME` | `ACCOUNTING`. The status bar indicates "1 rows returned in 0.01 seconds".

DNAME
ACCOUNTING

- Write a query that can display the name of the department in lower case which has department number 20.

Answer: `SELECT LOWER(dname) FROM dept WHERE deptno = 20;`

Output:

The screenshot shows the Oracle Database Express Edition interface. The SQL Commands window contains the query: `SELECT LOWER(dname) FROM dept WHERE deptno = 20;`. The results are displayed in a table with one row: `LOWER(DNAME)` | `research`. The status bar indicates "1 rows returned in 0.02 seconds".

LOWER(DNAME)
research

- Write a query that displays the incremented salary (`sal+250`) of employee Smith.

Answer: `SELECT ename, sal + 250 AS incremented_salary FROM emp WHERE ename = 'SMITH';`

Output:

The screenshot shows the Oracle Database Express Edition interface. The user is SCOTT. The SQL Commands window contains the following query:

```
SELECT ename, sal + 250 AS incremented_salary FROM emp WHERE ename = 'SMITH';
```

The query is executed, and the results are displayed in a table:

ENAME	INCREMENTED_SALARY
SMITH	1050

1 rows returned in 0.00 seconds

4. Write a query that displays the hiredate of employee KING.

Answer: SELECT hiredate FROM emp WHERE ename = 'KING';

Output:

The screenshot shows the Oracle Database Express Edition interface. The user is SCOTT. The SQL Commands window contains the following query:

```
SELECT hiredate FROM emp WHERE ename = 'KING';
```

The query is executed, and the results are displayed in a table:

HIREDATE
17-NOV-81

1 rows returned in 0.02 seconds

5. Write a query that displays the sum of salary of all the employees.

Answer: SELECT SUM(sal) AS total_salary FROM emp;

Output:

The screenshot shows the Oracle Database Express Edition interface. The user is SCOTT. The SQL Commands window contains the query: `SELECT SUM(sal) AS total_salary FROM emp;`. The query has been executed, and the results are displayed in a table with one row: `TOTAL_SALARY` with a value of `29025`. The status bar indicates "1 rows returned in 0.00 seconds".

TOTAL_SALARY
29025

6. Write a query that displays the salary and commission of employee Allen.

Answer: `SELECT sal, comm FROM emp WHERE ename = 'ALLEN';`

Output:

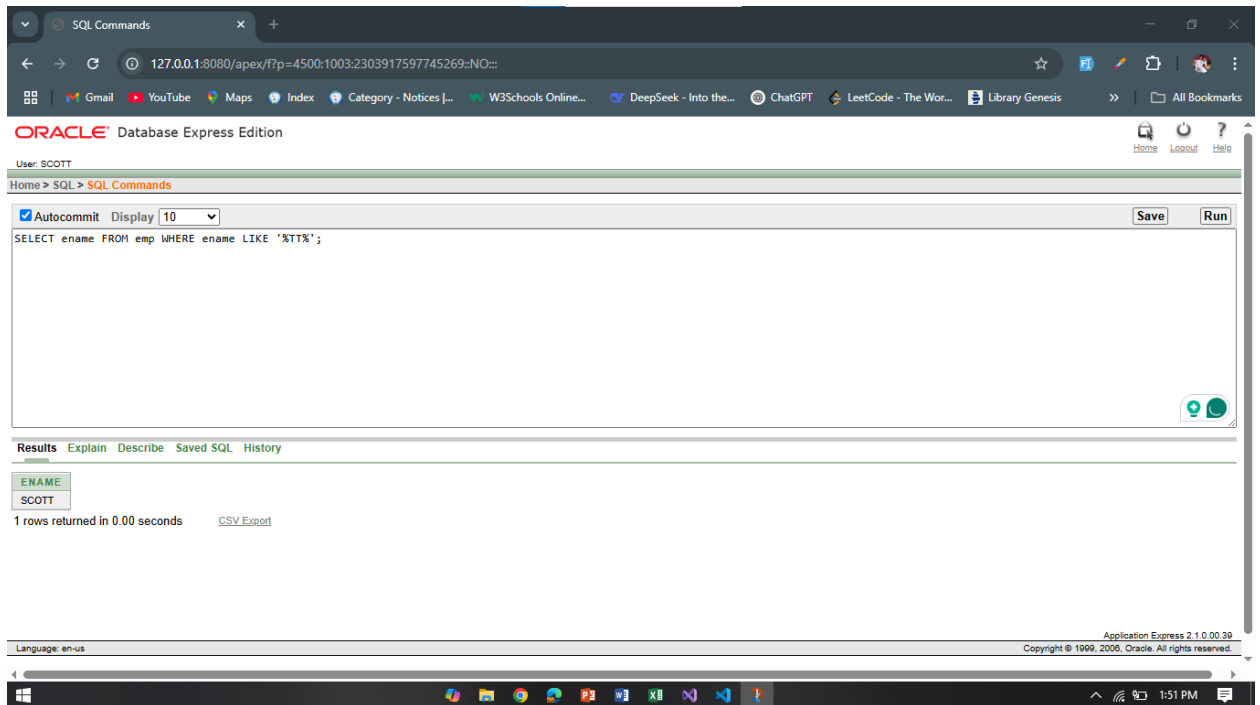
The screenshot shows the Oracle Database Express Edition interface. The user is SCOTT. The SQL Commands window contains the query: `SELECT sal, comm FROM emp WHERE ename = 'ALLEN';`. The query has been executed, and the results are displayed in a table with one row: `SAL` with a value of `1600` and `COMM` with a value of `300`. The status bar indicates "1 rows returned in 0.00 seconds".

SAL	COMM
1600	300

7. Write a query that displays only those employees who have TT (double T) in their name.

Answer: SELECT ename FROM emp WHERE ename LIKE '%TT%';

Output:



****After solving the above questions using Oracle 10g, write the PL/SQLs in a MS Word document (Write down the answer and give screenshot of the result of the query. The name of the document MUST be your ID and the PL/SQLs MUST be numbered accordingly) and upload it in the provided link in your VUES account**