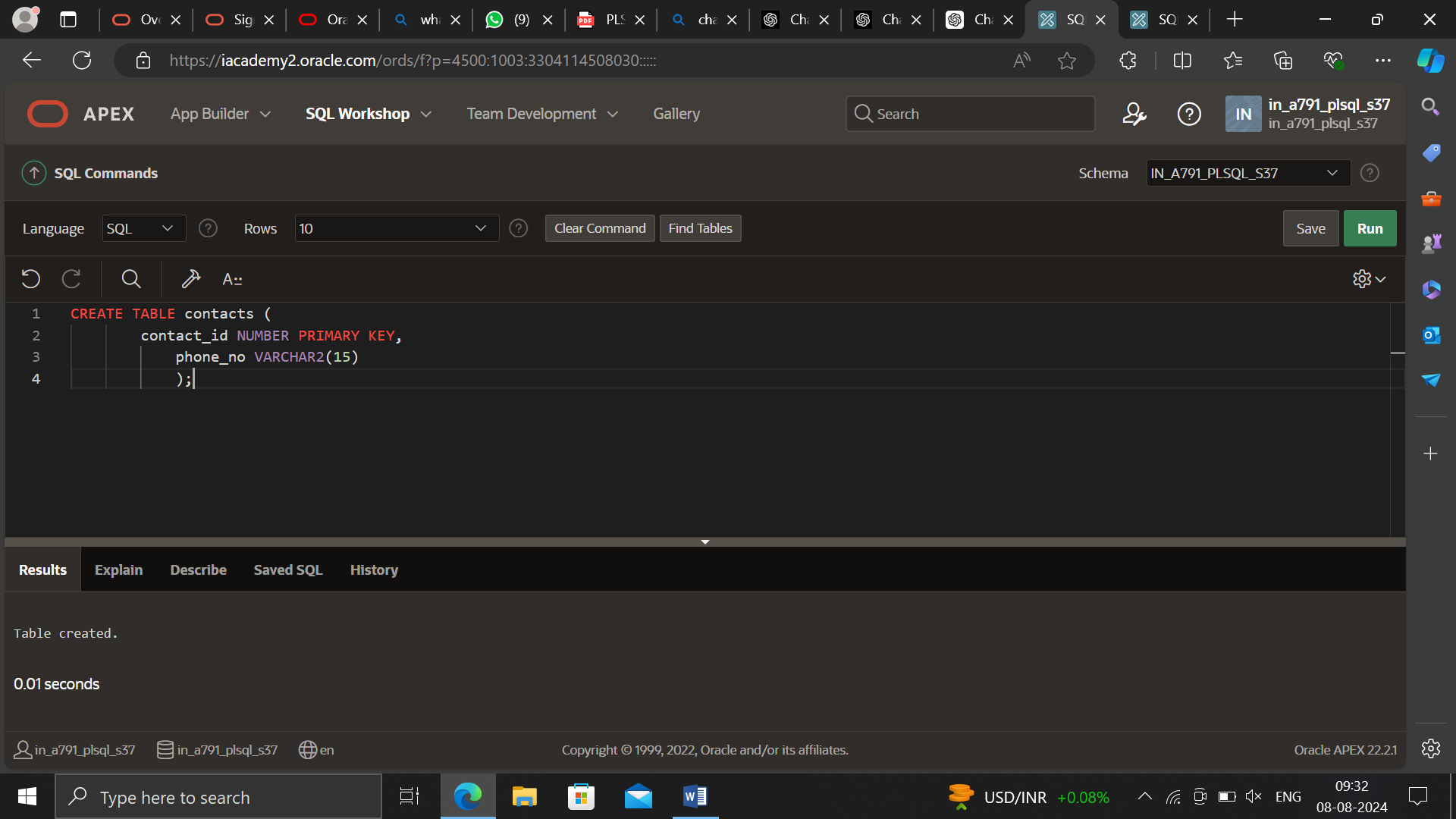
a. CREATE TABLE contacts (

contact\_id NUMBER PRIMARY KEY,

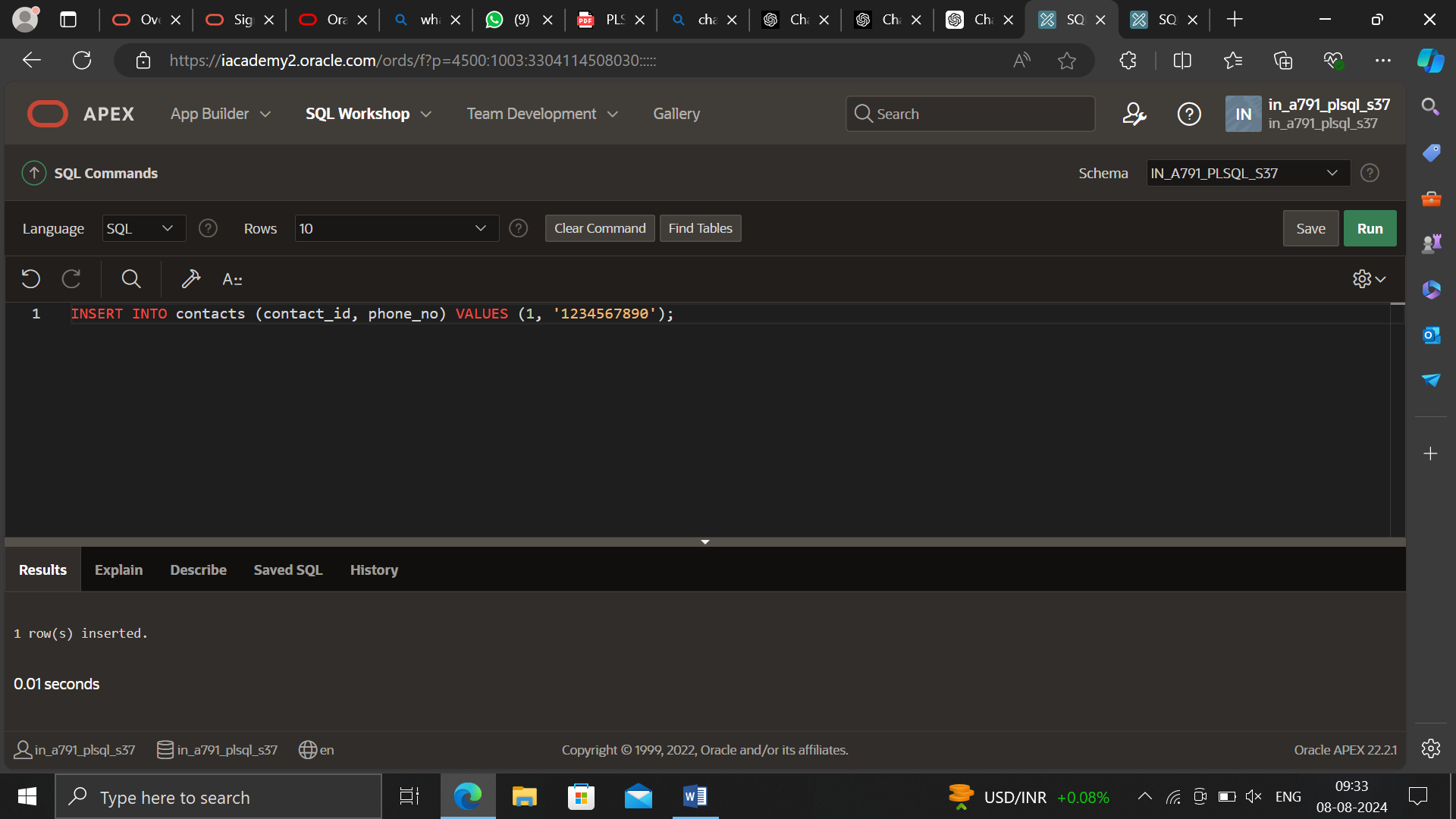
phone\_no VARCHAR2(15)

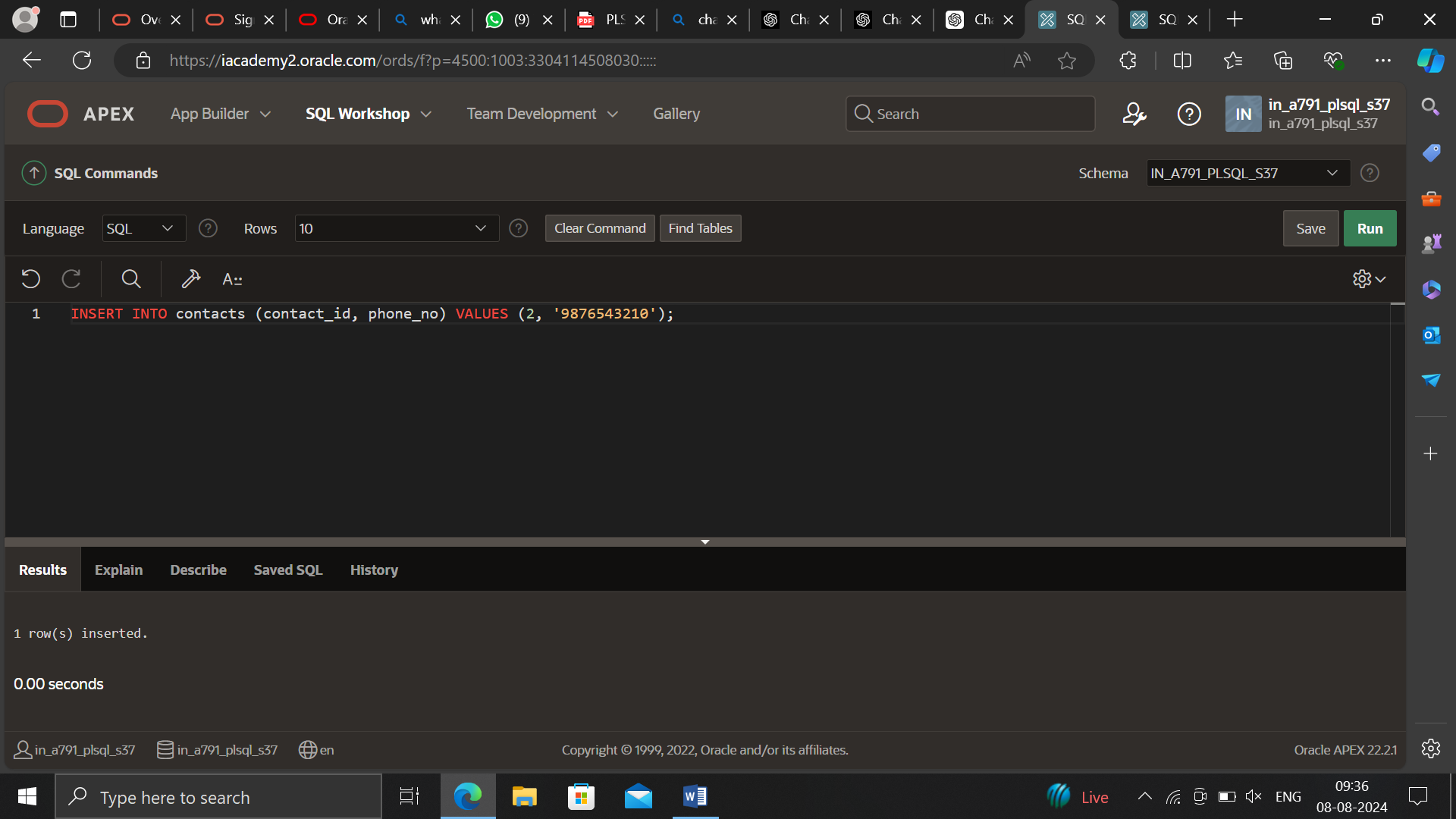
);



INSERT INTO contacts (contact\_id, phone\_no) VALUES (1, '1234567890');

INSERT INTO contacts (contact\_id, phone\_no) VALUES (2, '9876543210');





CREATE OR REPLACE PROCEDURE format\_phone

(p\_phone\_no IN OUT VARCHAR2) IS

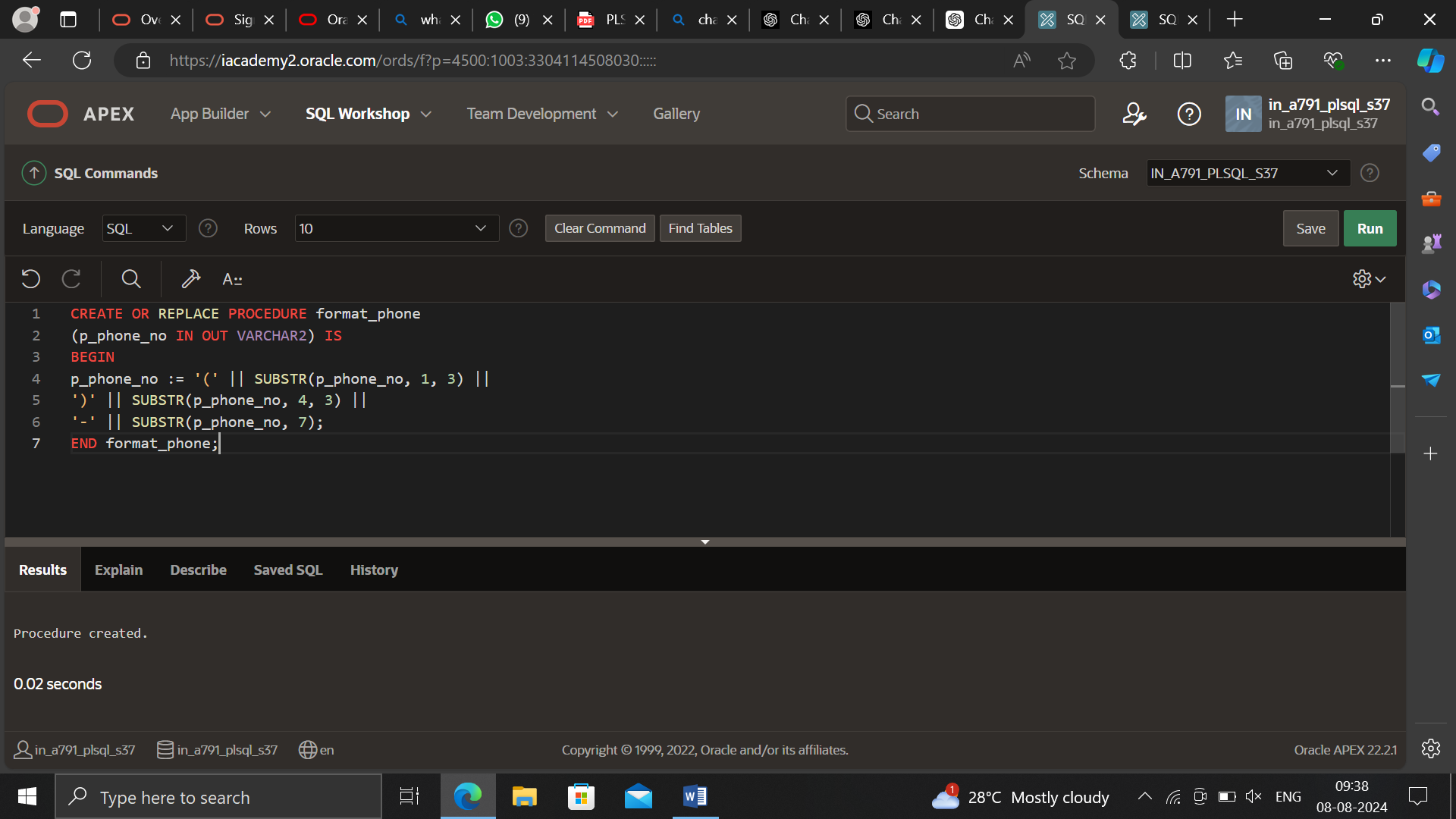
BEGIN

p\_phone\_no := '(' || SUBSTR(p\_phone\_no, 1, 3) ||

')' || SUBSTR(p\_phone\_no, 4, 3) ||

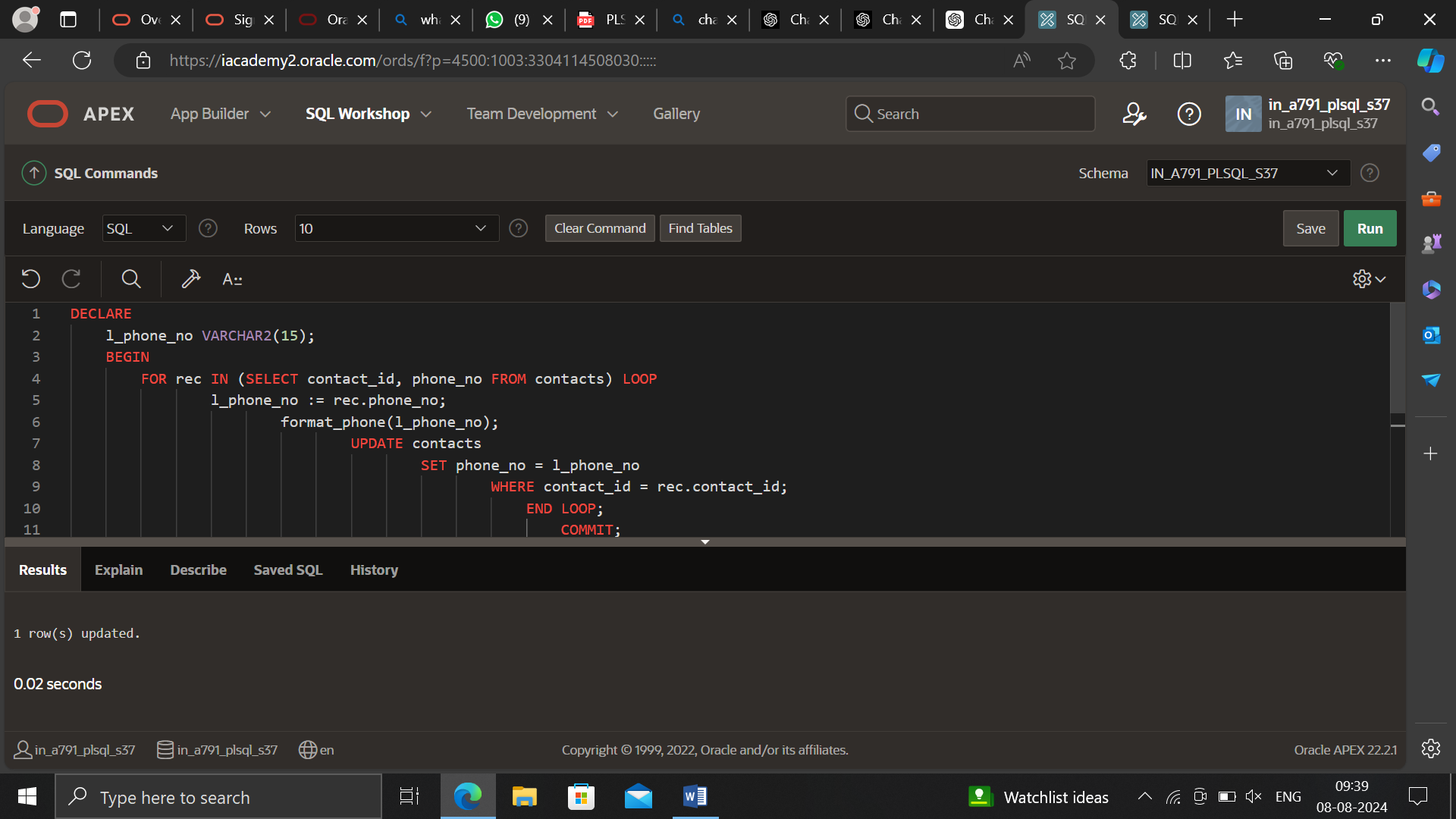
'-' || SUBSTR(p\_phone\_no, 7);

END format\_phone;



DECLARE l\_phone\_no VARCHAR2(15); BEGIN FOR rec IN (SELECT contact\_id, phone\_no FROM contacts) LOOP l\_phone\_no := rec.phone\_no; format\_phone(l\_phone\_no); UPDATE contacts SET phone\_no = l\_phone\_no WHERE contact\_id = rec.contact\_id; END LOOP; COMMIT; END; /

DECLARE l\_phone\_no VARCHAR2(15); BEGIN FOR rec IN (SELECT contact\_id, phone\_no FROM contacts) LOOP l\_phone\_no := rec.phone\_no; format\_phone(l\_phone\_no); UPDATE contacts SET phone\_no = l\_phone\_no WHERE contact\_id = rec.contact\_id; END LOOP; COMMIT; END; /



DECLARE

l\_phone\_no VARCHAR2(15);

BEGIN

FOR rec IN (SELECT contact\_id, phone\_no FROM contacts) LOOP

l\_phone\_no := rec.phone\_no;

format\_phone(l\_phone\_no);

UPDATE contacts

SET phone\_no = l\_phone\_no

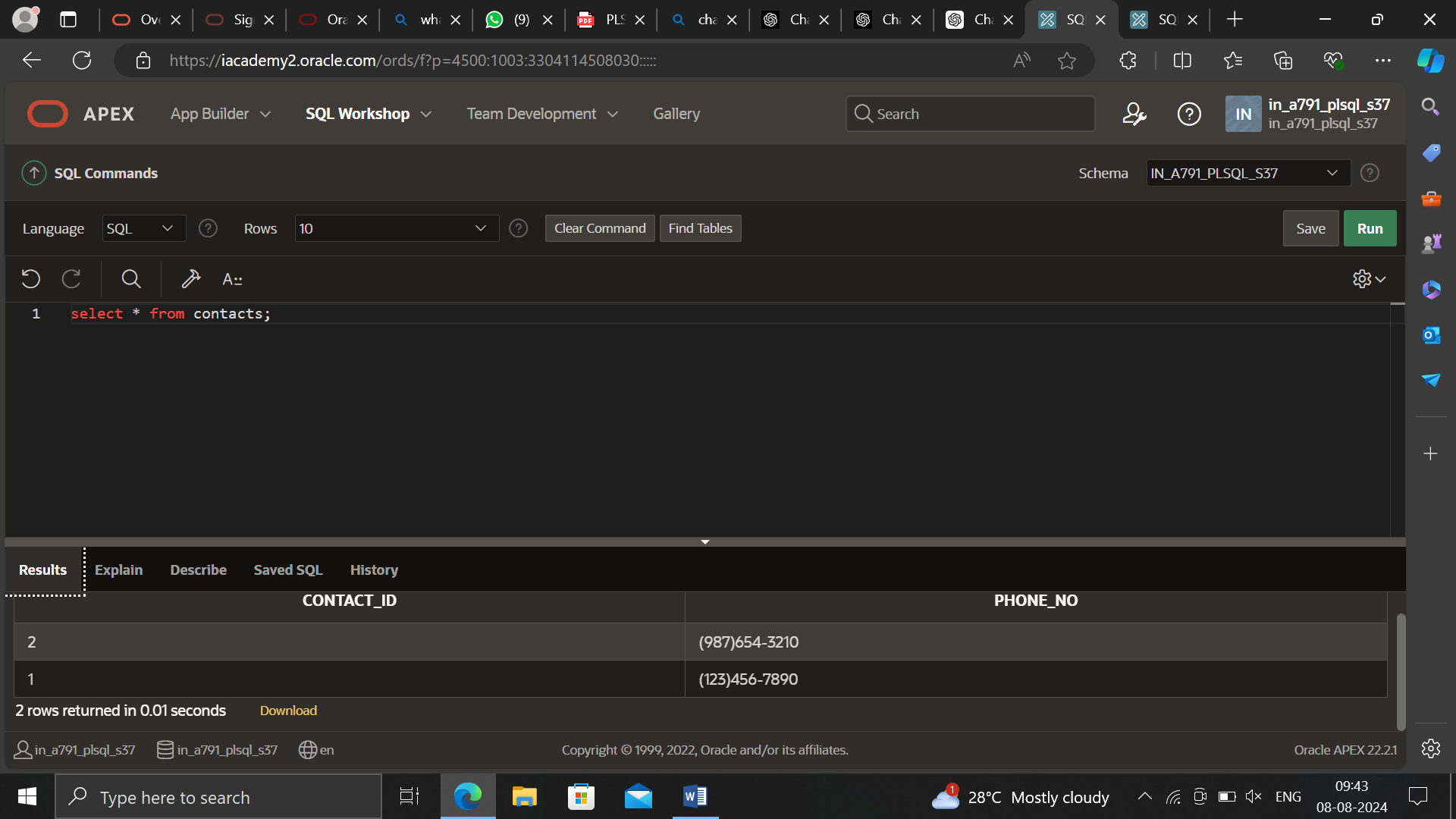
WHERE contact\_id = rec.contact\_id;

END LOOP;

COMMIT;

END;

/



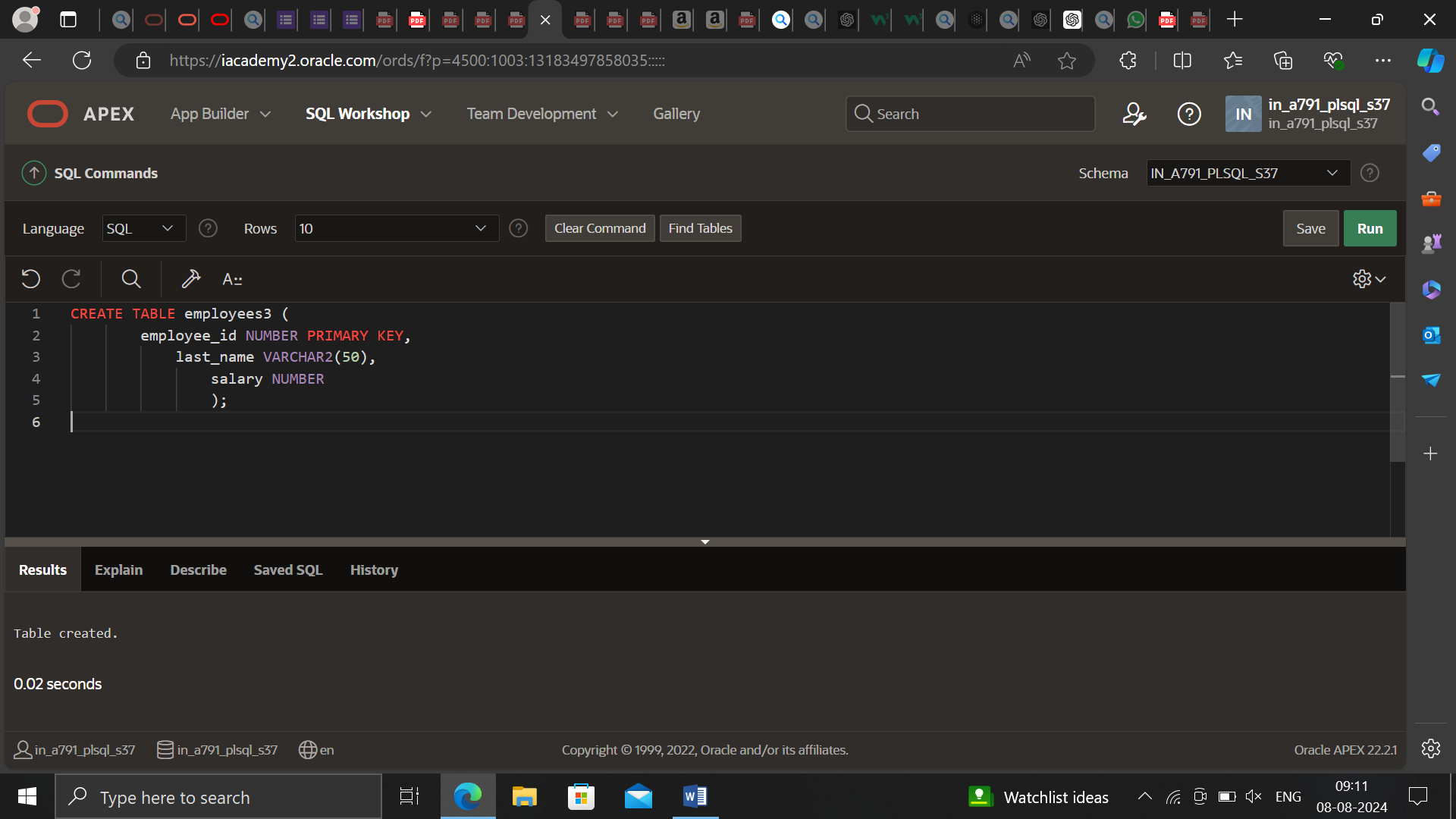
b. CREATE TABLE employees (

employee\_id NUMBER PRIMARY KEY,

last\_name VARCHAR2(50),

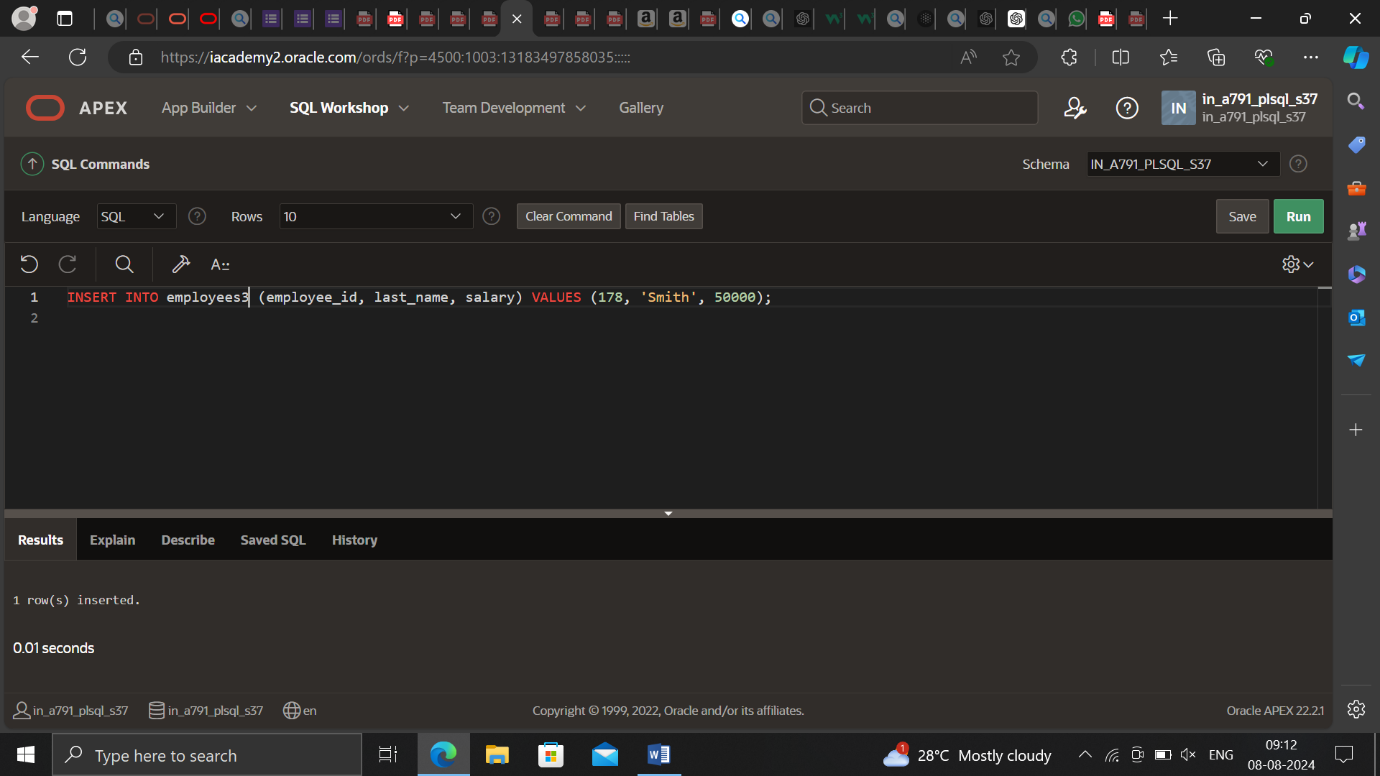
salary NUMBER

);

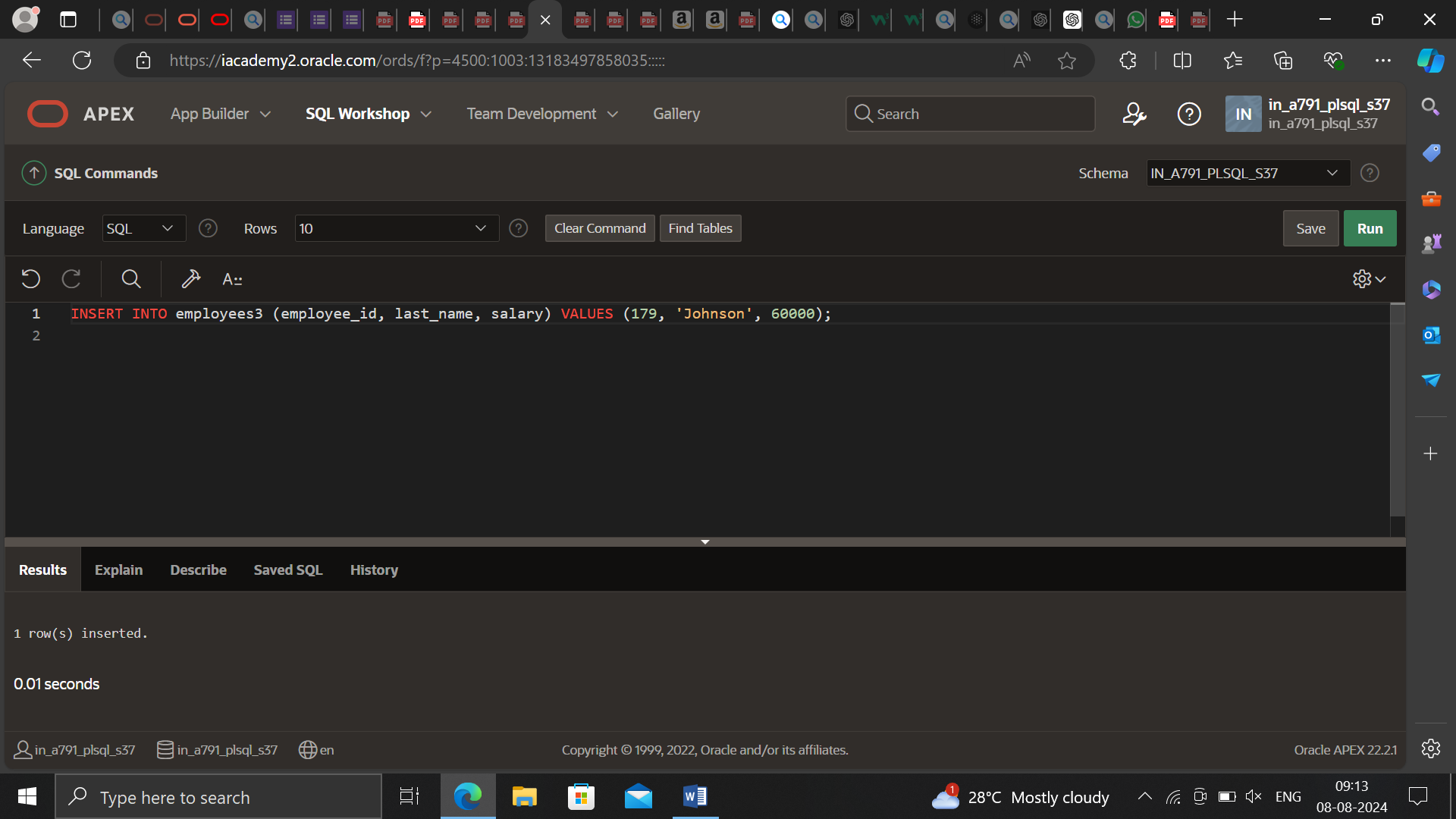


-- Sample data insertion

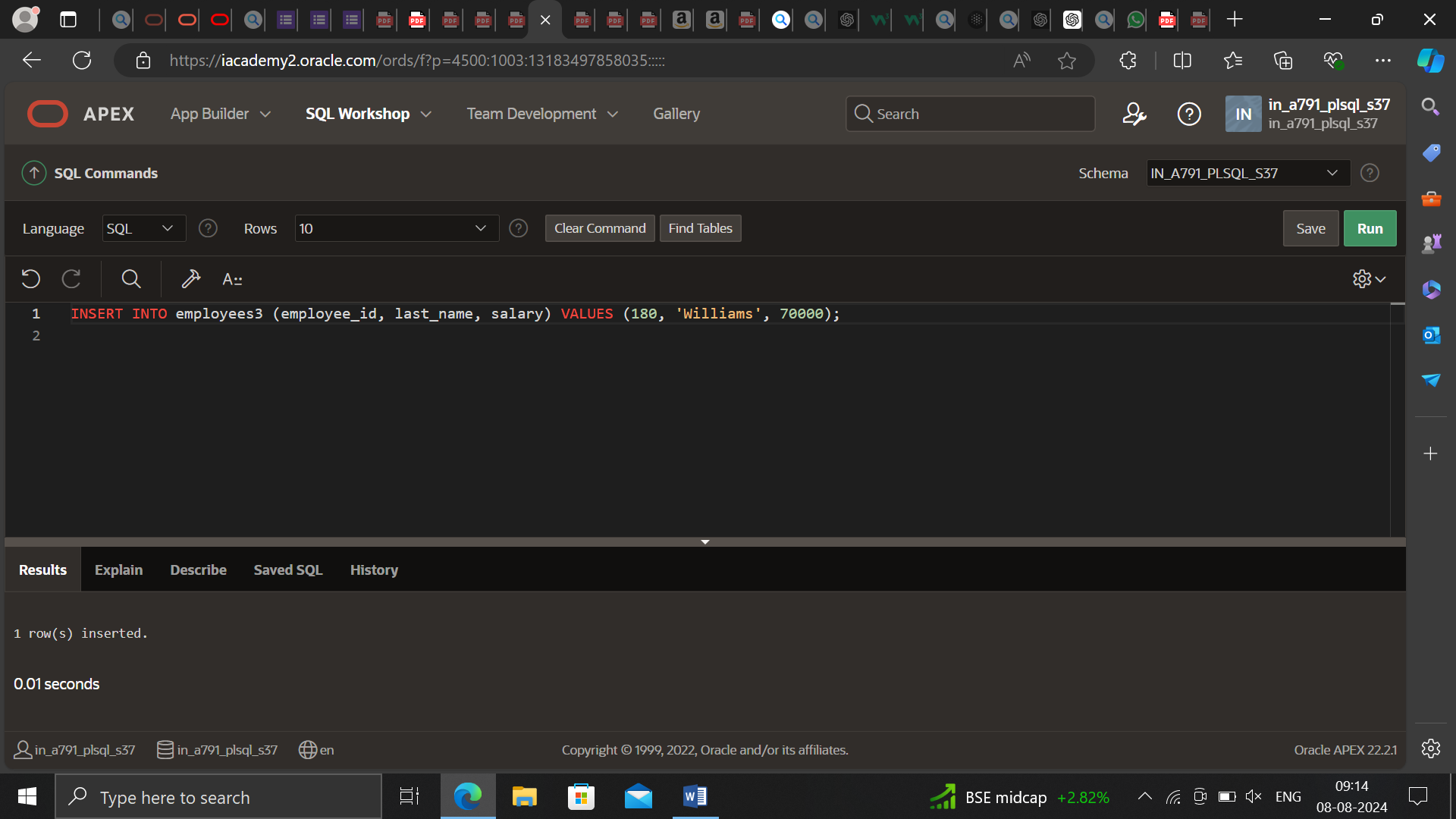
INSERT INTO employees (employee\_id, last\_name, salary) VALUES (178, 'Smith', 50000);



INSERT INTO employees (employee\_id, last\_name, salary) VALUES (179, 'Johnson', 60000);



INSERT INTO employees (employee\_id, last\_name, salary) VALUES (180, 'Williams', 70000);



CREATE OR REPLACE PROCEDURE query\_emp (

p\_emp\_id IN employees.employee\_id%TYPE,

p\_emp\_name OUT employees.last\_name%TYPE,

p\_emp\_sal OUT employees.salary%TYPE

) AS

BEGIN

SELECT last\_name, salary

INTO p\_emp\_name, p\_emp\_sal

FROM employees

WHERE employee\_id = p\_emp\_id;

EXCEPTION

WHEN NO\_DATA\_FOUND THEN

p\_emp\_name := 'Not found';

p\_emp\_sal := 0;

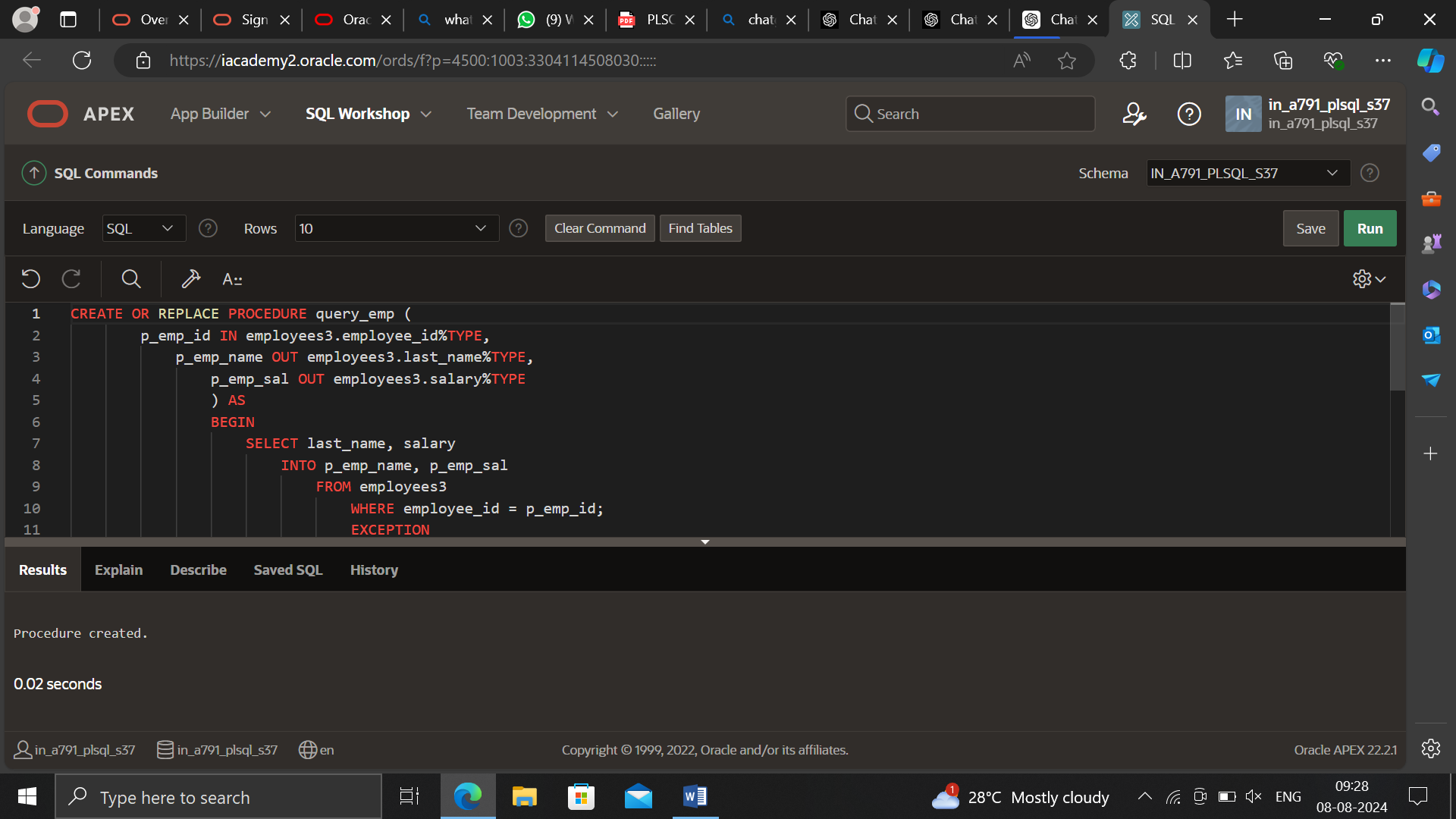
WHEN OTHERS THEN

p\_emp\_name := 'Error';

p\_emp\_sal := -1;

END;

/



DECLARE

a\_emp\_name employees.last\_name%TYPE;

a\_emp\_sal employees.salary%TYPE;

BEGIN

query\_emp(178, a\_emp\_name, a\_emp\_sal);

DBMS\_OUTPUT.PUT\_LINE('Name: ' || a\_emp\_name);

DBMS\_OUTPUT.PUT\_LINE('Salary: ' || a\_emp\_sal);

END;

