1. Procedure which does group by information:

DECLARE

CURSOR cur\_order IS

SELECT REPORT\_DATE, COUNT(REPORT\_ID) AS count\_res

FROM TRANSACTION\_REPORT

GROUP BY REPORT\_DATE;

BEGIN

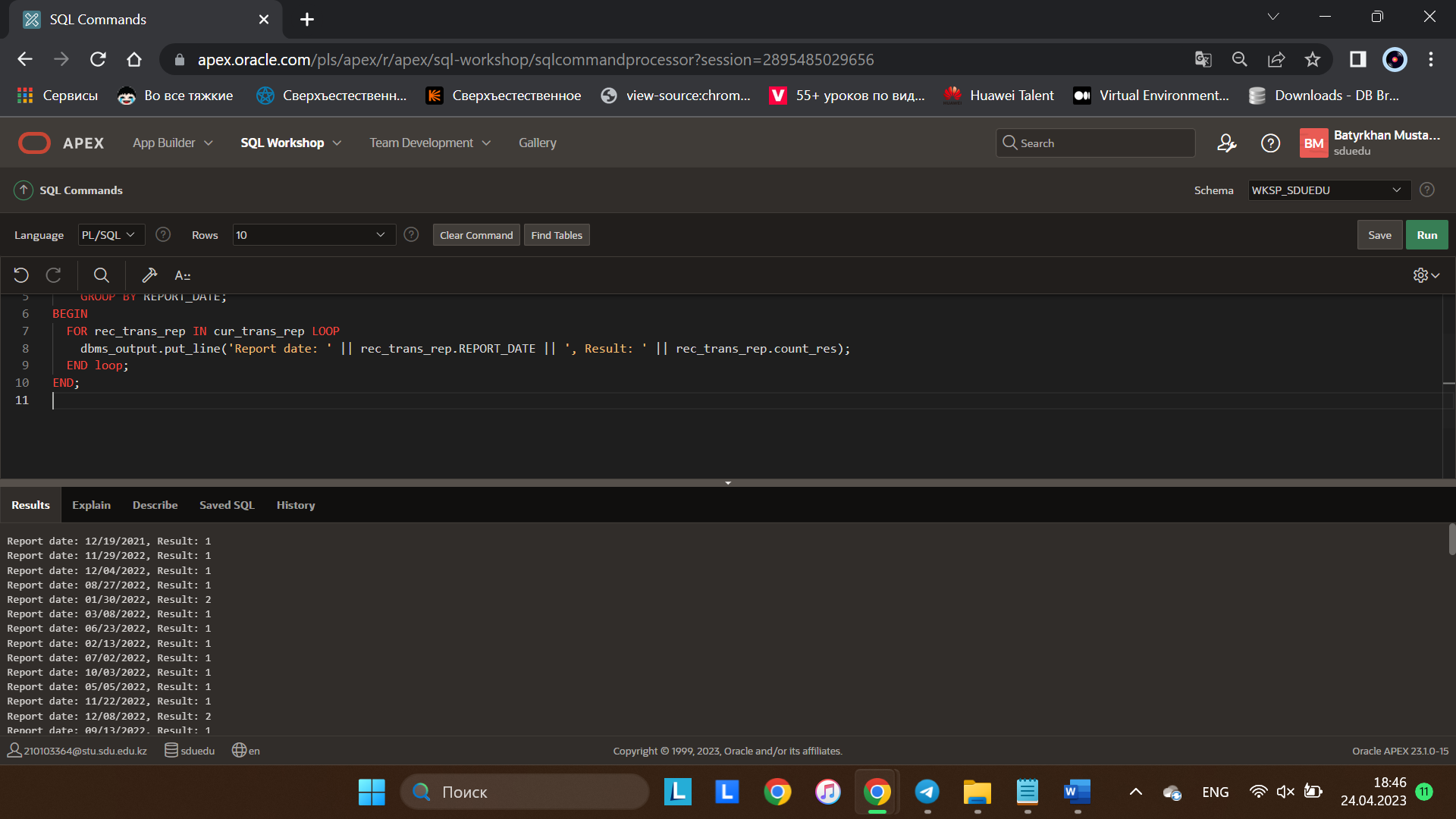
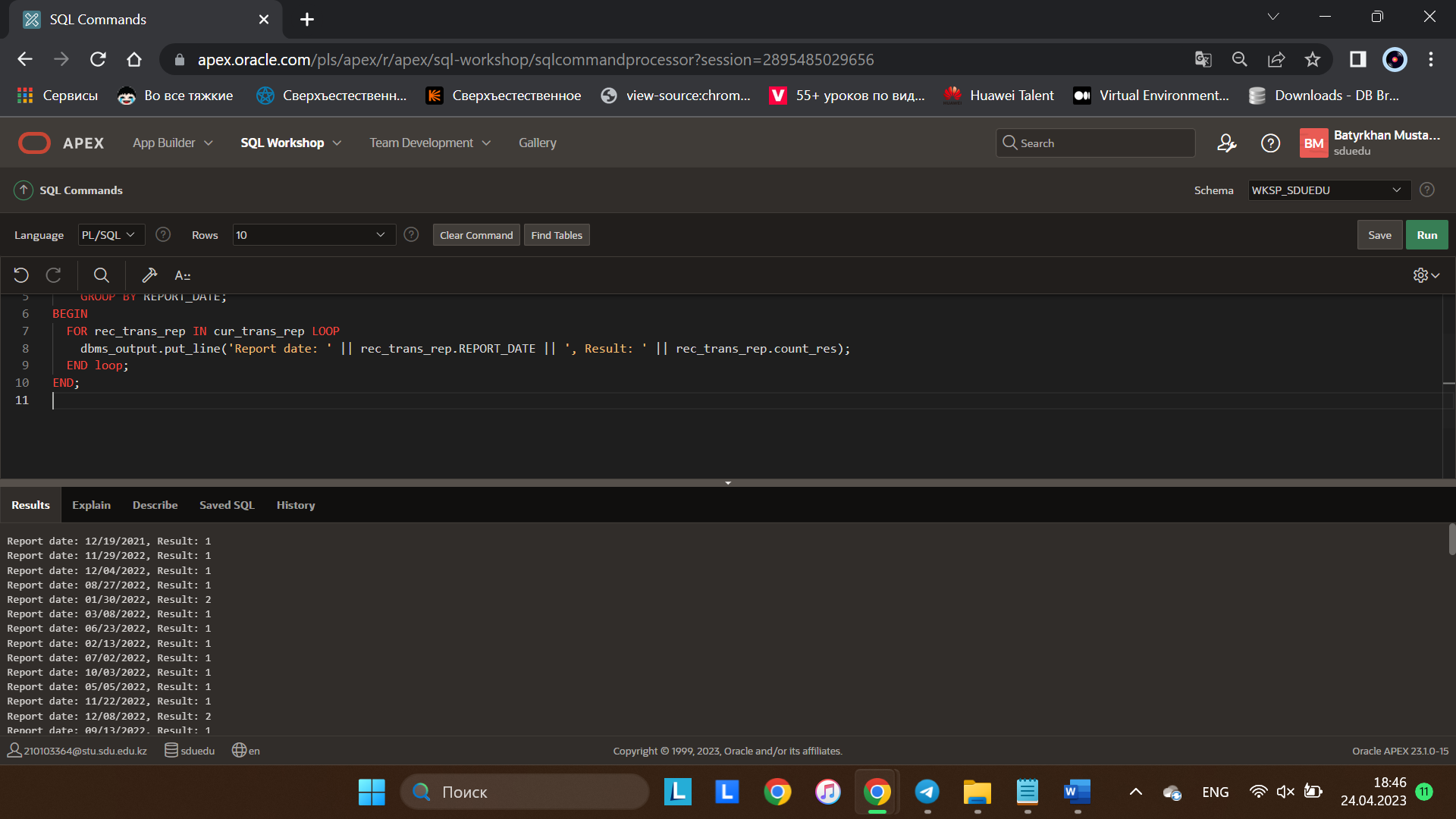
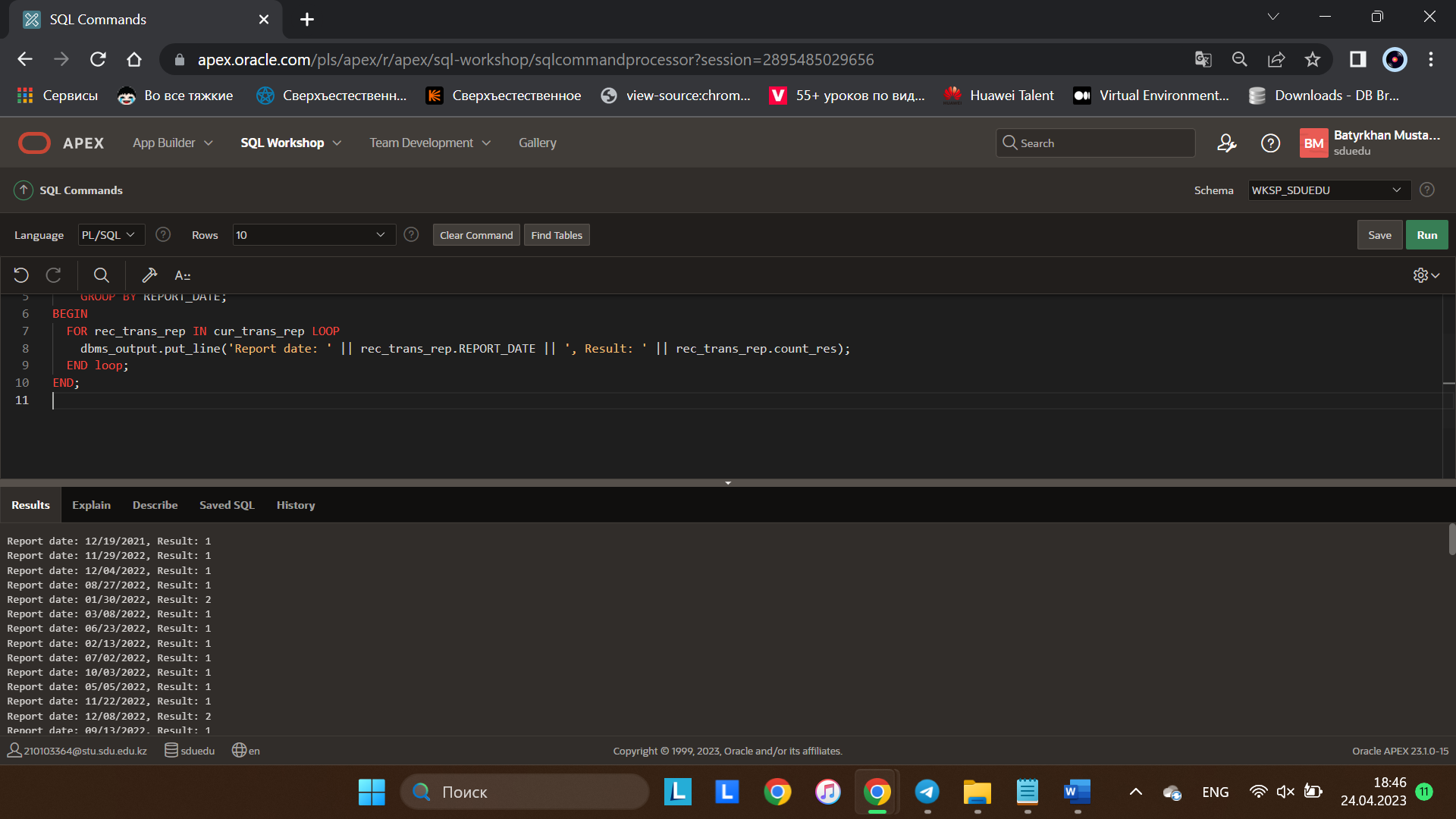
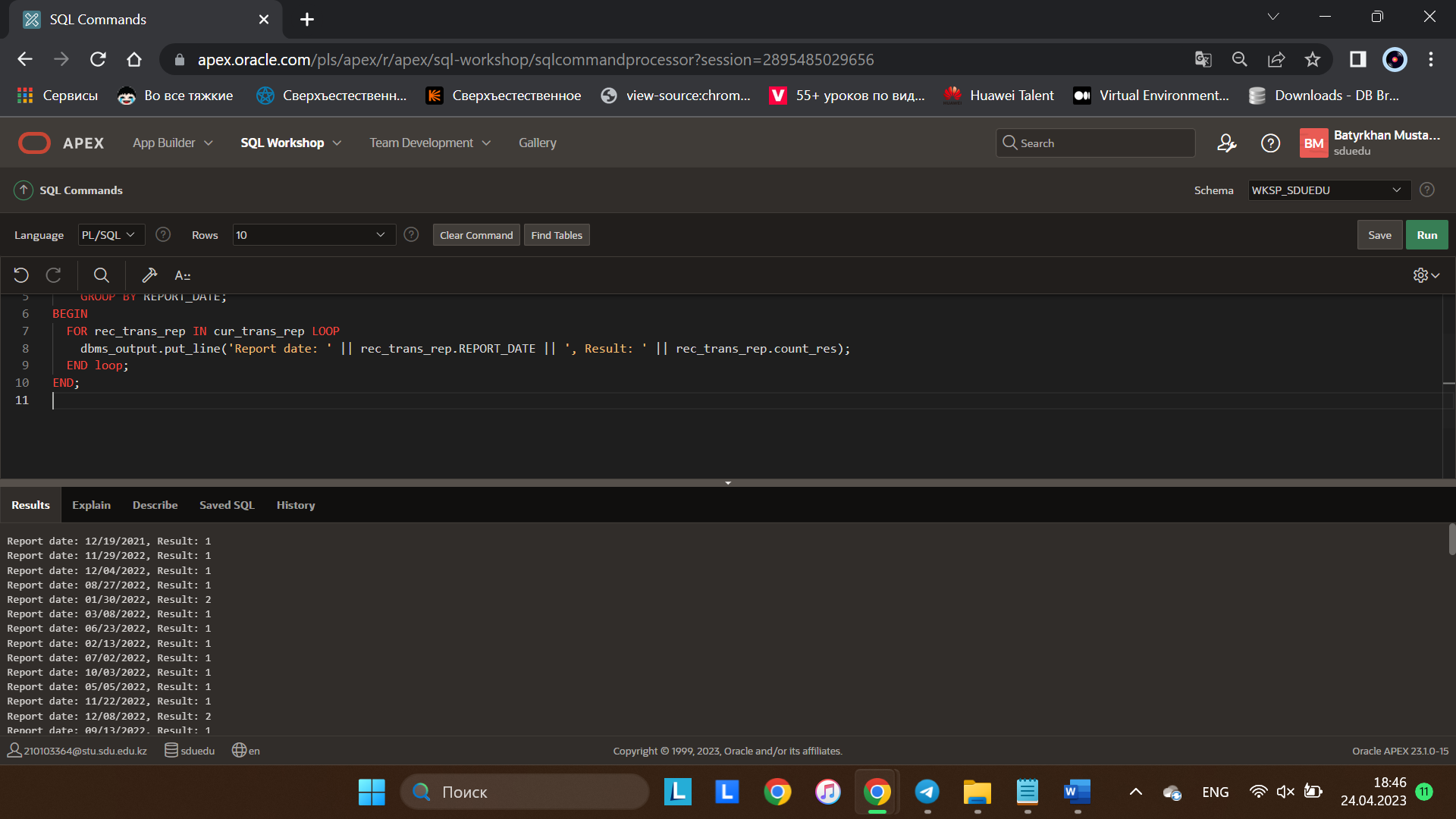
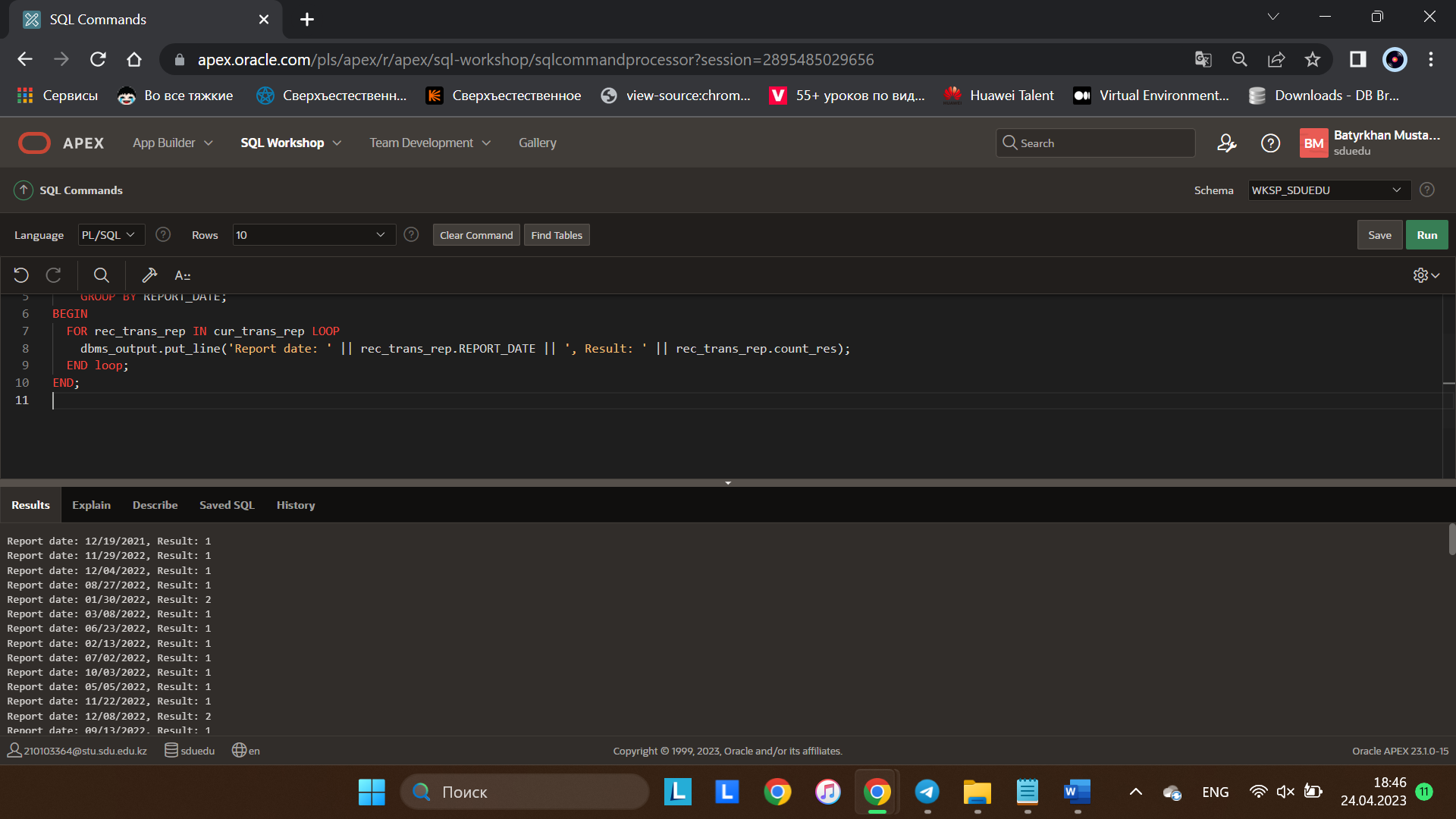
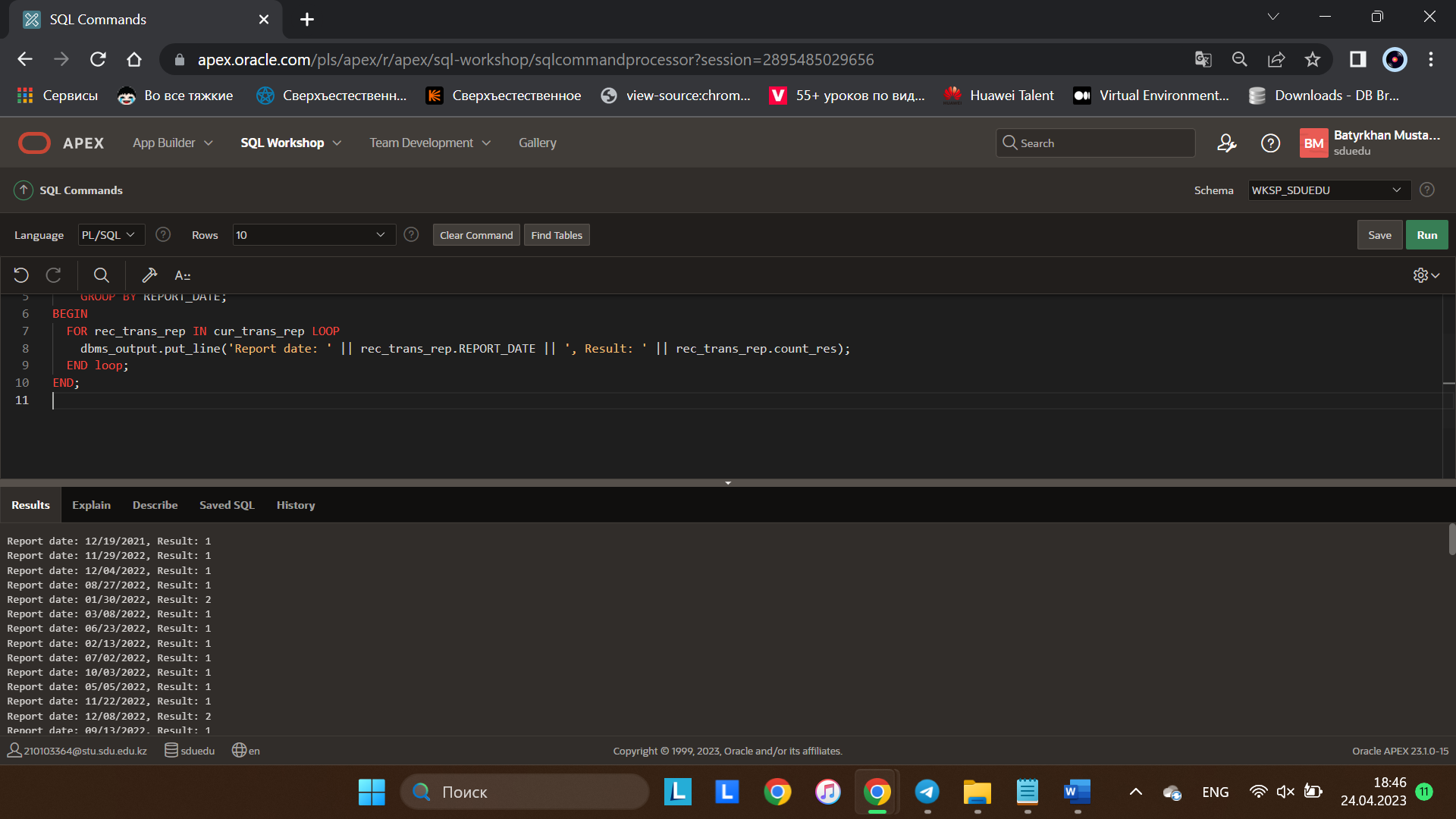
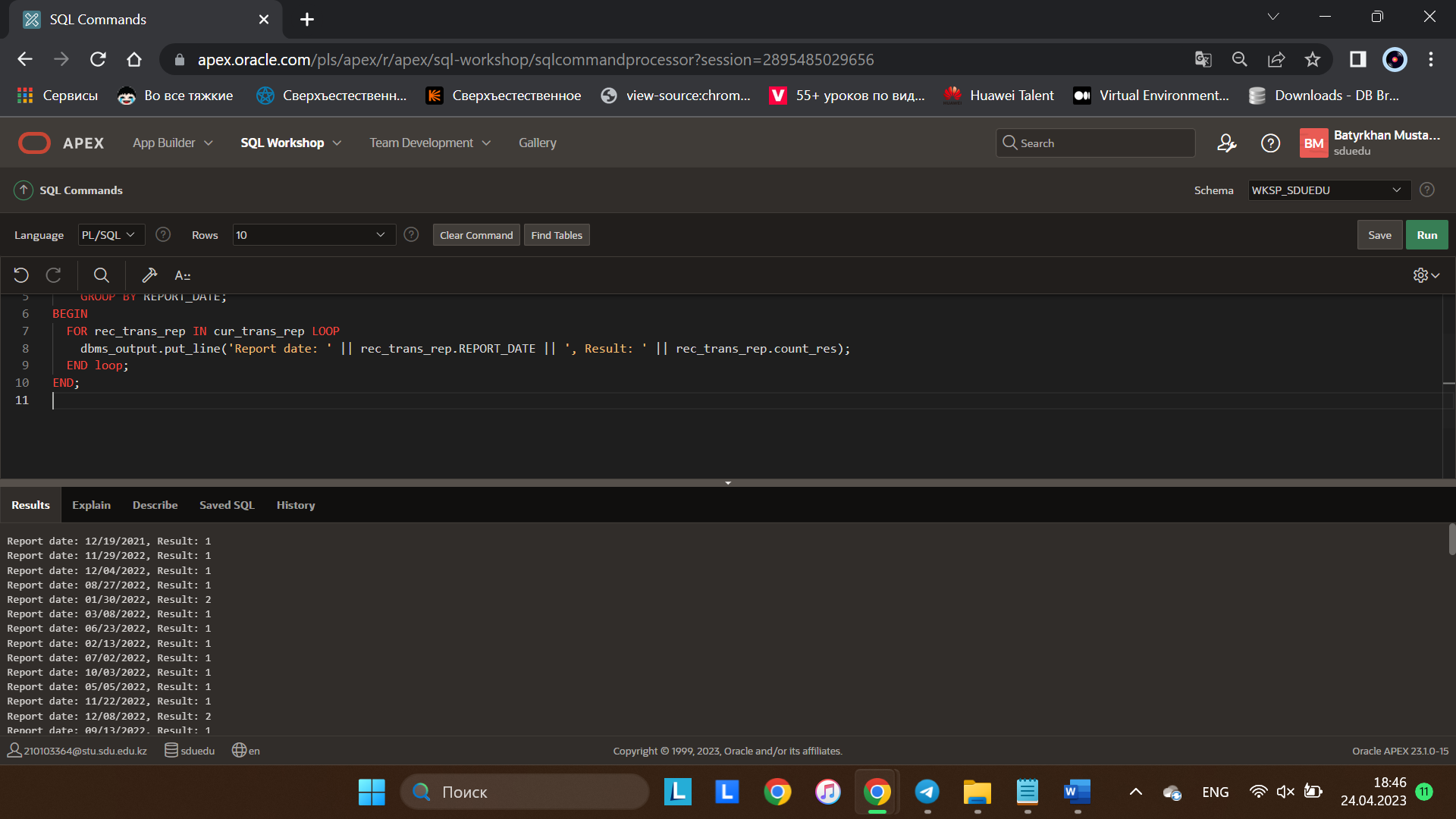
FOR rec\_order IN cur\_order LOOP

dbms\_output.put\_line('Report date: ' || rec\_order.REPORT\_DATE || ', Result: ' || rec\_order.count\_res);

END loop;

END;

// Using this procedure, we can get information about how many reports were on a certain date



2. Function which counts the number of records:

DECLARE

rec\_count INTEGER;

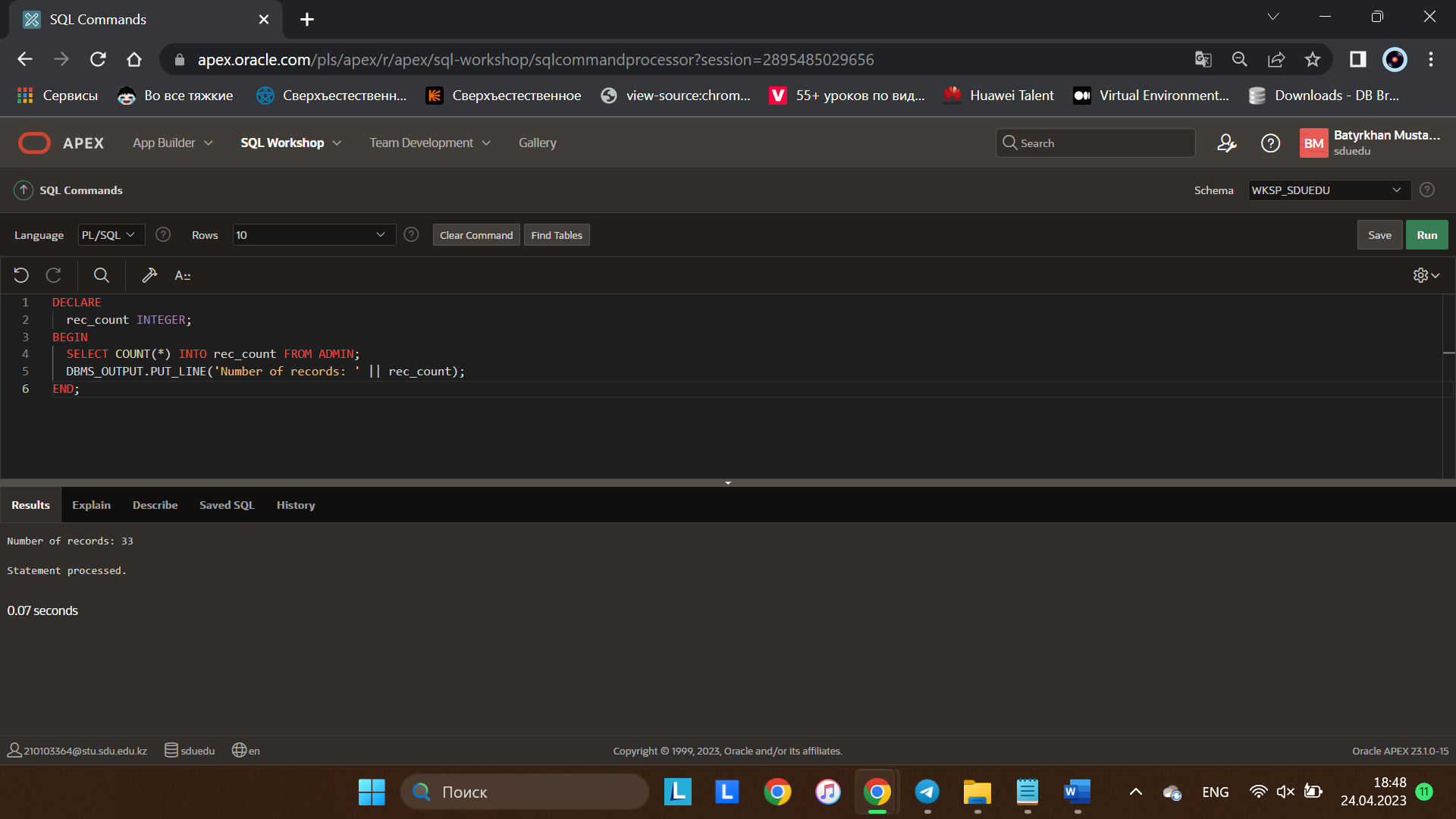
BEGIN

SELECT COUNT(\*) INTO rec\_count FROM ADMIN;

DBMS\_OUTPUT.PUT\_LINE('Number of records: ' || rec\_count);

END;

// This procedure counts all administrators that we have



3. Procedure which uses SQL%ROWCOUNT to determine the number of rows affected:

CREATE OR REPLACE PROCEDURE rowscount

AS

i NUMBER;

BEGIN

UPDATE BRAND

SET brand\_name = brand\_name + '\_save\_animals!'

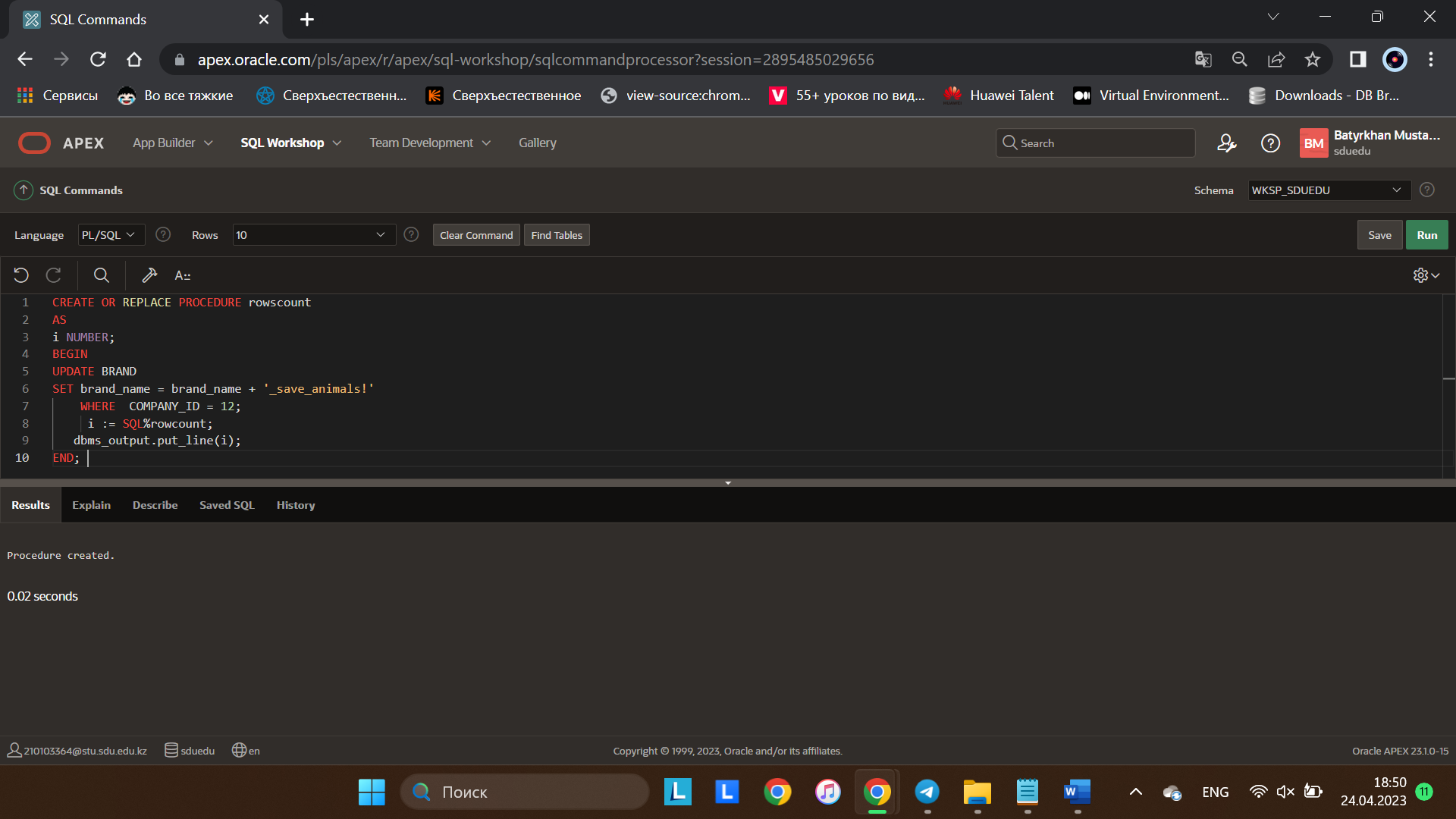
WHERE COMPANY\_ID = 12;

i := SQL%rowcount;

dbms\_output.put\_line(i);

END;

// A certain company, if desired, can start presenting its products as brands of a charity organization by adding the slogan “save\_animals” to the name



4. Add user-defined exception which disallows to enter title of item (e.g. book) to be less than 5 characters:

DECLARE

less\_than\_5\_character EXCEPTION;

title Website.website\_name%type;BEGIN

BEGIN

IF LENGTH( title ) < 5 THEN

RAISE less\_than\_5\_character;

END IF;

EXCEPTION

WHEN less\_than\_5\_character THEN

dbms\_output.put\_line('TITLE\_CANNOT\_BE\_LESS\_THAN\_5\_CHARACTER');

RAISE;

END;

EXCEPTION

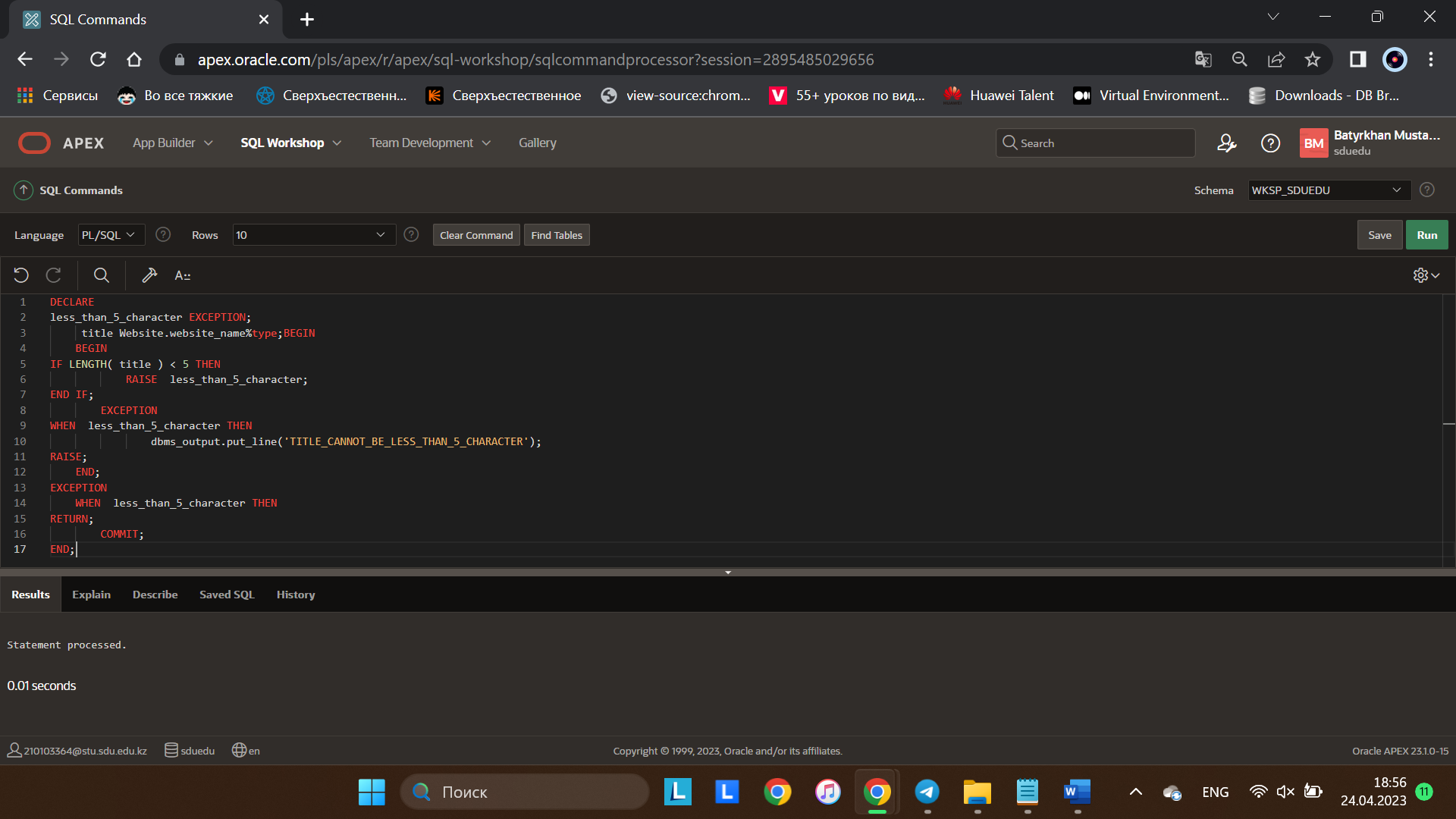
WHEN less\_than\_5\_character THEN

RETURN;

COMMIT;

END;

// A special exception that will rise if the length of the entered site name in the website table does not reach the norm (there are 5 letters here)



5.Create a trigger before insert on any entity which will show the current number of rows in the table:

CREATE OR REPLACE TRIGGER NUMBER\_OF\_TRANSACTIONS

BEFORE INSERT ON TRANSACTION\_REPORT

DECLARE

RES INT;

BEGIN

SELECT count(\*) INTO RES FROM TRANSACTION\_REPORT;

DBMS\_OUTPUT.PUT\_LINE(RES);

END;

// A trigger that will output the number of transactions in the table before entering a new element

