## 

## **Experiment-8**

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**Branch:** 18AITAIML-2 **Section/Group:** B

**Semester:** 7 **Date of Performance:** 10th November, 2021

**Subject Name:** Advanced Database Management Lab **Subject Code:** CSP - 434

# Aim/Overview of the practical:

To implement various operations on Packages and Triggers.

# Task to be done:

To implement various operations on Packages and Triggers.

# Steps to be followed:

**PACKAGE:**

**Creating a table STUDENTS and then returning it:**

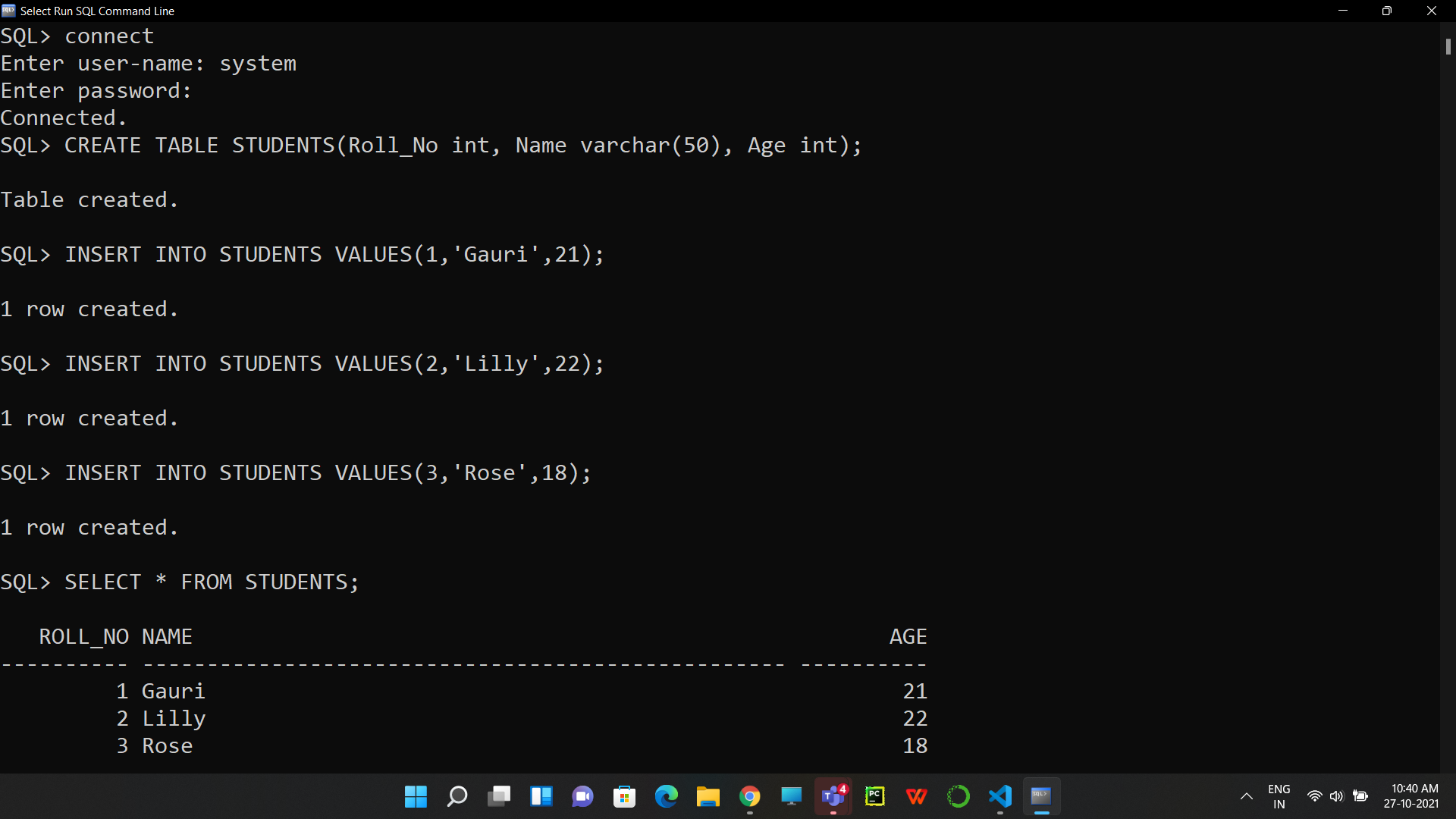
# CREATE TABLE STUDENTS(Roll\_No int, Name varchar(50), Age int);

# INSERT INTO STUDENTS VALUES(1,'Gauri',21);

# INSERT INTO STUDENTS VALUES(2,'Lilly',22);

# INSERT INTO STUDENTS VALUES(3,'Rose',18);

# SELECT \* FROM STUDENTS;



**Creating the package body and then defining it:**

1. SET SERVEROUTPUT ON;

CREATE PACKAGE STU\_AGE AS

PROCEDURE FIND\_AGE(S\_ID STUDENTS.Roll\_No%TYPE);

END STU\_AGE;

/

CREATE OR REPLACE PACKAGE BODY STU\_AGE AS

PROCEDURE FIND\_AGE(S\_ID STUDENTS.Roll\_No%TYPE) IS

S\_AGE STUDENTS.Age%TYPE;

BEGIN

SELECT Age INTO S\_Age

FROM STUDENTS

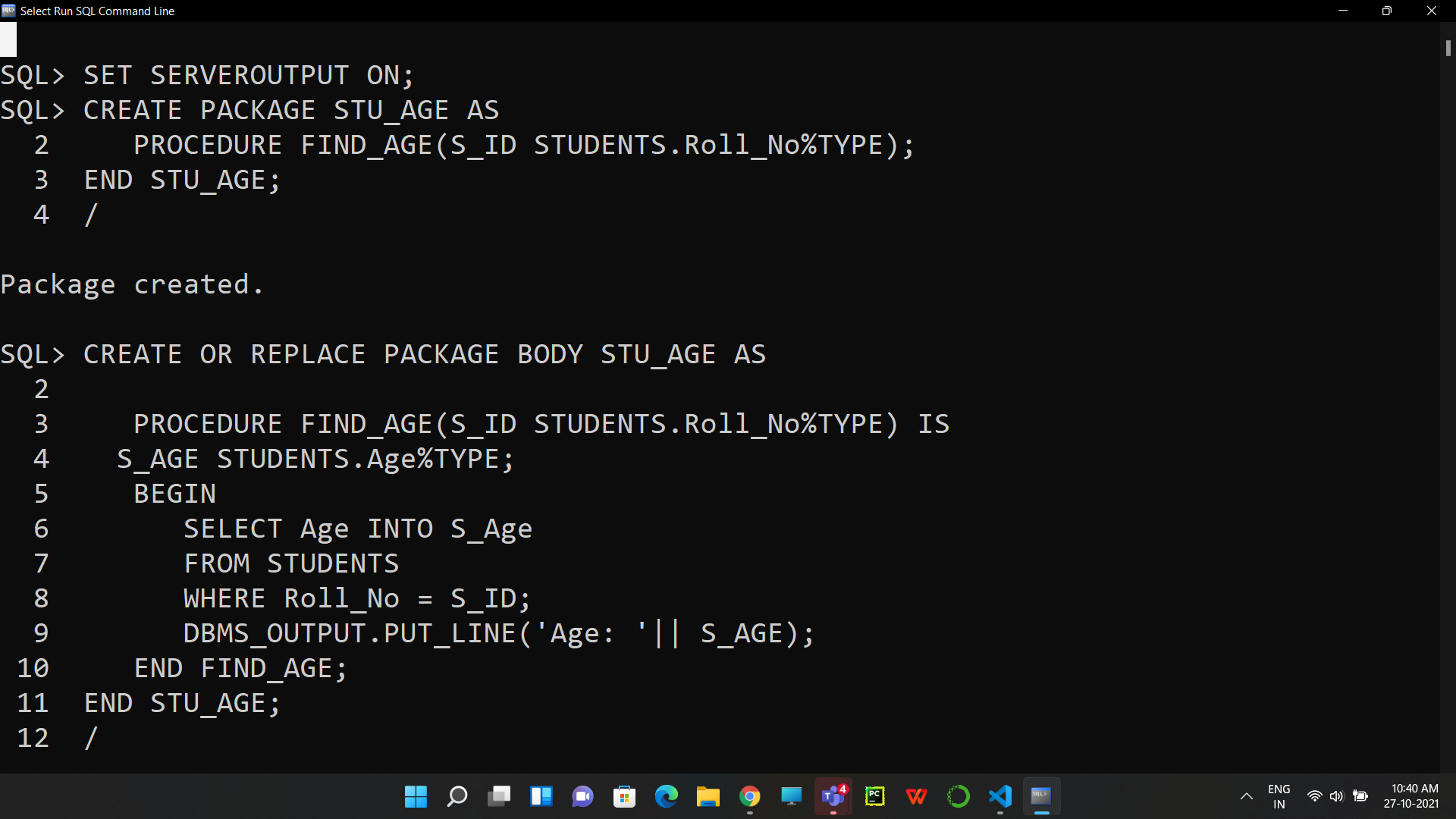
WHERE Roll\_No = S\_ID;

DBMS\_OUTPUT.PUT\_LINE('Age: '|| S\_AGE);

END FIND\_AGE;

END STU\_AGE;

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**Implementing the Package:**

1. DECLARE

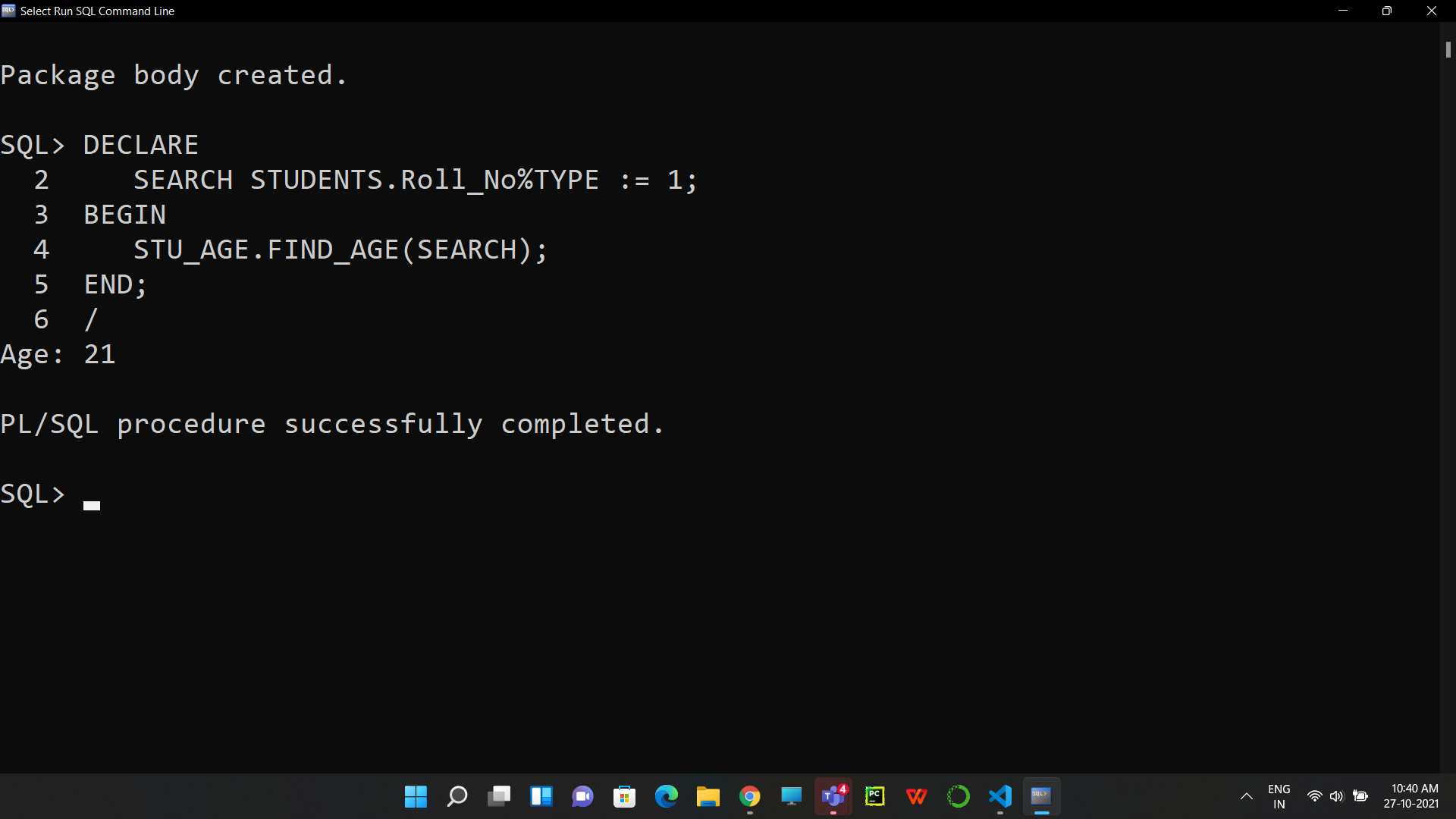
SEARCH STUDENTS.Roll\_No%TYPE := 1;

BEGIN

STU\_AGE.FIND\_AGE(SEARCH);

END;

/



**TRIGGERS:**

**Returning the table MARKS and declaring the Trigger:**

1. SELECT \* FROM MARKS;

SET SERVEROUTPUT ON;

CREATE OR REPLACE TRIGGER TRIG\_MARKS

BEFORE UPDATE ON MARKS

FOR EACH ROW

WHEN (NEW.Marks>=0)

DECLARE

MARKS\_DIFF NUMBER;

BEGIN

MARKS\_DIFF:=:NEW.Marks-:OLD.Marks;

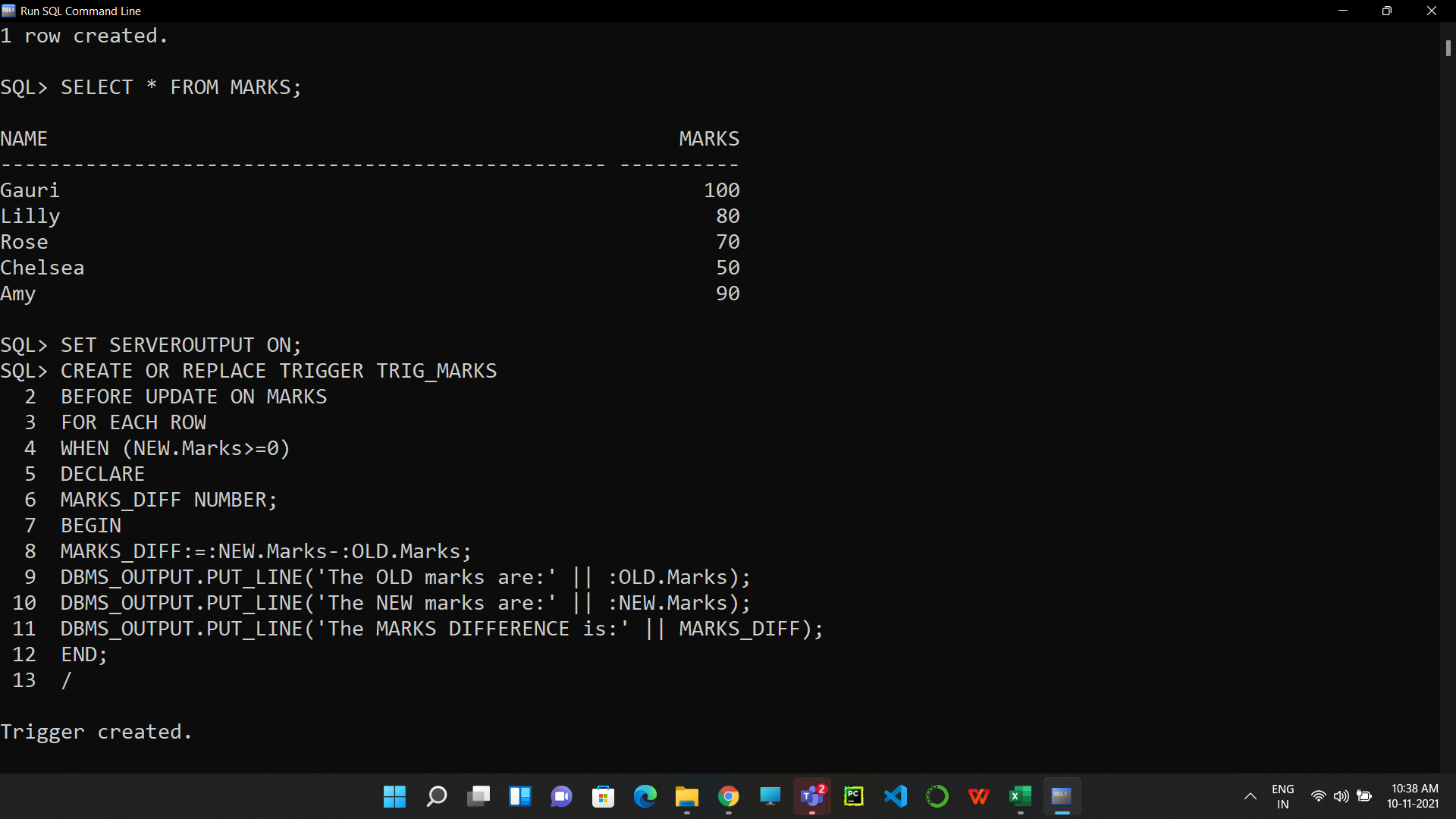
DBMS\_OUTPUT.PUT\_LINE('The OLD marks are:' || :OLD.Marks);

DBMS\_OUTPUT.PUT\_LINE('The NEW marks are:' || :NEW.Marks);

DBMS\_OUTPUT.PUT\_LINE('The MARKS DIFFERENCE is:' || MARKS\_DIFF);

END;

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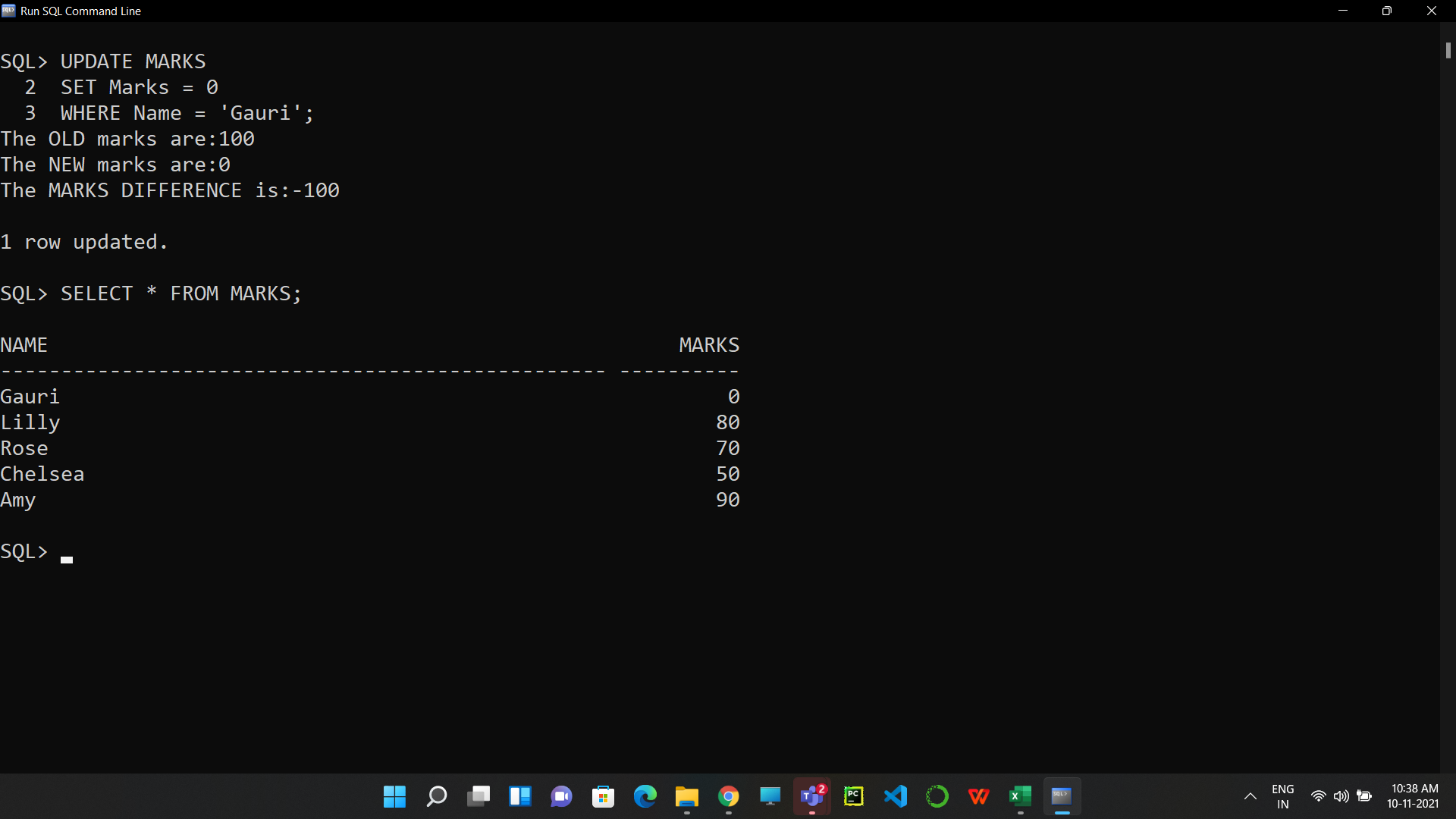
**Implementing the Trigger:**

1. UPDATE MARKS

SET Marks = 0

WHERE Name = 'Gauri';

SELECT \* FROM MARKS;



1. **Result/Output/Writing Summary:**

* Successfully implemented PACKAGES.
* Successfully implemented TRIGGERS.
* Successfully implemented operations on both PACKAGES and TRIGGERS.
* Successfully understood the functioning and importance of the above mentioned.

# Learning outcomes (What I have learnt):

* How to implement PACKAGES on SQL Command Line.
* How to implement TRIGGERS on SQL Command Line.
* How to implement TRIGGERS on a table.

**Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):**

|  |  |  |  |
| --- | --- | --- | --- |
| Sr. No. | Parameters | Marks Obtained | Maximum Marks |
| 1. |  |  |  |
| 2. |  |  |  |
| 3. |  |  |  |