11-09-2024

DBMS Lab

HU22CSEN0100287

Pl/sql for square

```
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\H-CSE-506-38> sqlplus hu22csen0100287/seswarap@//172.21.51.130:1521/orclpdb

SQL*Plus: Release 23.0.0.0.0 - Production on Wed Sep 11 10:14:15 2024
Version 23.4.0.24.05

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Connected to:
Oracle Database 21c Enterprise Edition Release 21.0.0.0.0 - Production
Version 21.3.0.0.0

SQL> ed hoo.sql

SQL> set serveroutput on
```

```
SQL> ed hoo.sql

SQL> set serveroutput on
SQL> @ hoo.sql
900

PL/SQL procedure successfully completed.

SQL>
```

hoo.sql

File   Edit   View

```
declare
a number:=30;
begin
dbms_output.put_line(a*a);
end;
/
```

Procedure for sum of 3 nos

```
SQL> ed q2.sql

SQL> @ q2.sql

Procedure created.

Enter value for n1: 1
old     3:       n1 NUMBER := &n1;
new     3:       n1 NUMBER := 1;
Enter value for n2: 2
old     4:       n2 NUMBER := &n2;
new     4:       n2 NUMBER := 2;
Enter value for n3: 3
old     5:       n3 NUMBER := &n3;
new     5:       n3 NUMBER := 3;

PL/SQL procedure successfully completed.

SQL> ed q2.sql

SQL> SET SERVEROUTPUT ON;
SQL> ed q2.sql

SQL> @ q2.sql

Procedure created.

Enter value for n1: 1
old     3:       n1 NUMBER := &n1;
new     3:       n1 NUMBER := 1;
Enter value for n2: 2
old     4:       n2 NUMBER := &n2;
new     4:       n2 NUMBER := 2;
Enter value for n3: 3
old     5:       n3 NUMBER := &n3;
new     5:       n3 NUMBER := 3;
sum6

PL/SQL procedure successfully completed.

SQL>
```
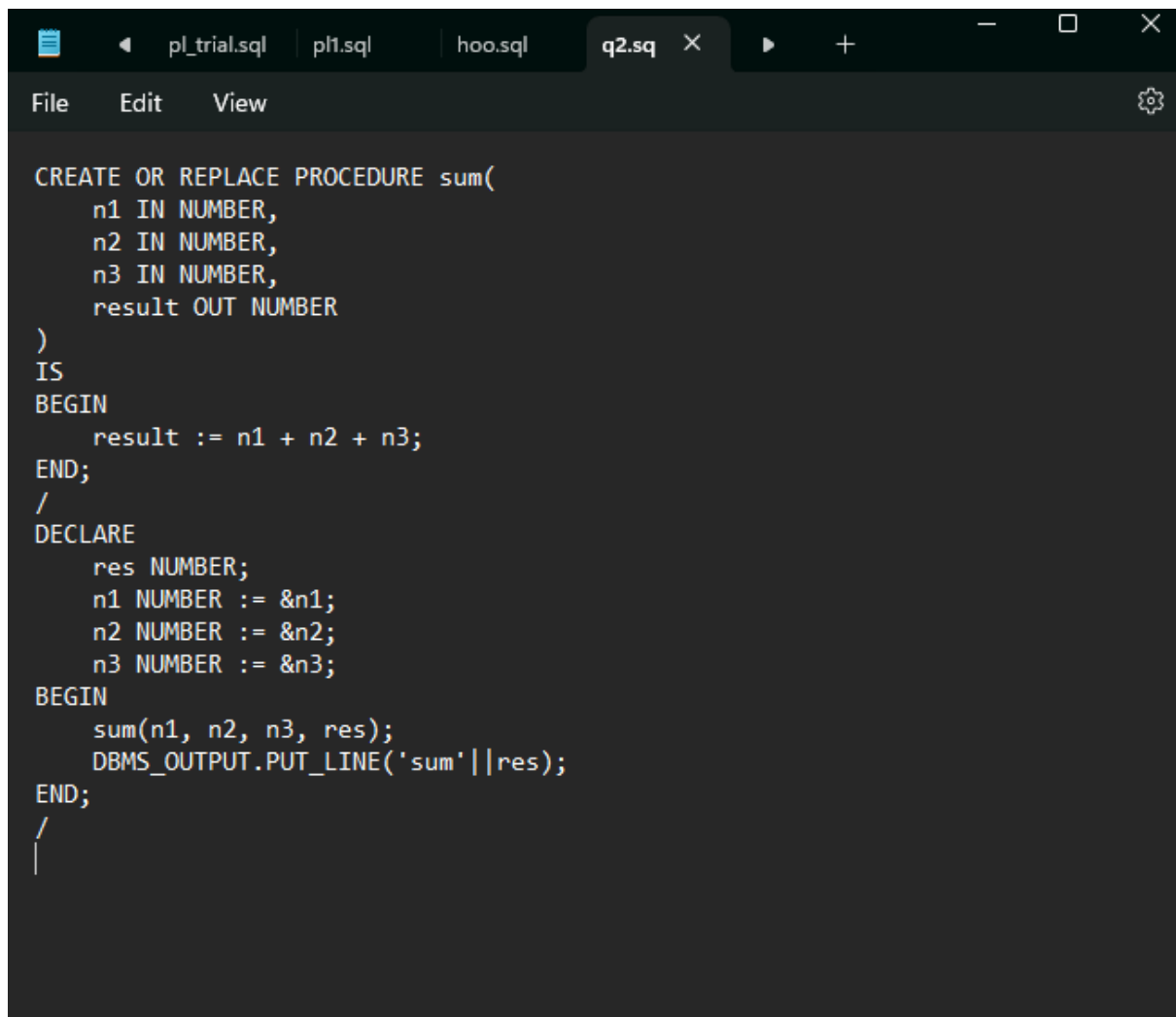
```
CREATE OR REPLACE PROCEDURE sum(
    n1 IN NUMBER,
    n2 IN NUMBER,
    n3 IN NUMBER,
    result OUT NUMBER
)
IS
BEGIN
    result := n1 + n2 + n3;
END;
/
DECLARE
    res NUMBER;
    n1 NUMBER := &n1;
    n2 NUMBER := &n2;
    n3 NUMBER := &n3;
BEGIN
    sum(n1, n2, n3, res);
    DBMS_OUTPUT.PUT_LINE('sum'||res);
END;
/
|
```

Function to find greatest of 2 nos

```
SQL> ed q3.sql

SQL> @ q3.sql

Function created.

Enter value for num1: 1
old    3:        num1 NUMBER := &num1;
new    3:        num1 NUMBER := 1;
Enter value for num2: 3
old    4:        num2 NUMBER := &num2;
new    4:        num2 NUMBER := 3;
The greatest number is: 3

PL/SQL procedure successfully completed.

SQL>
```
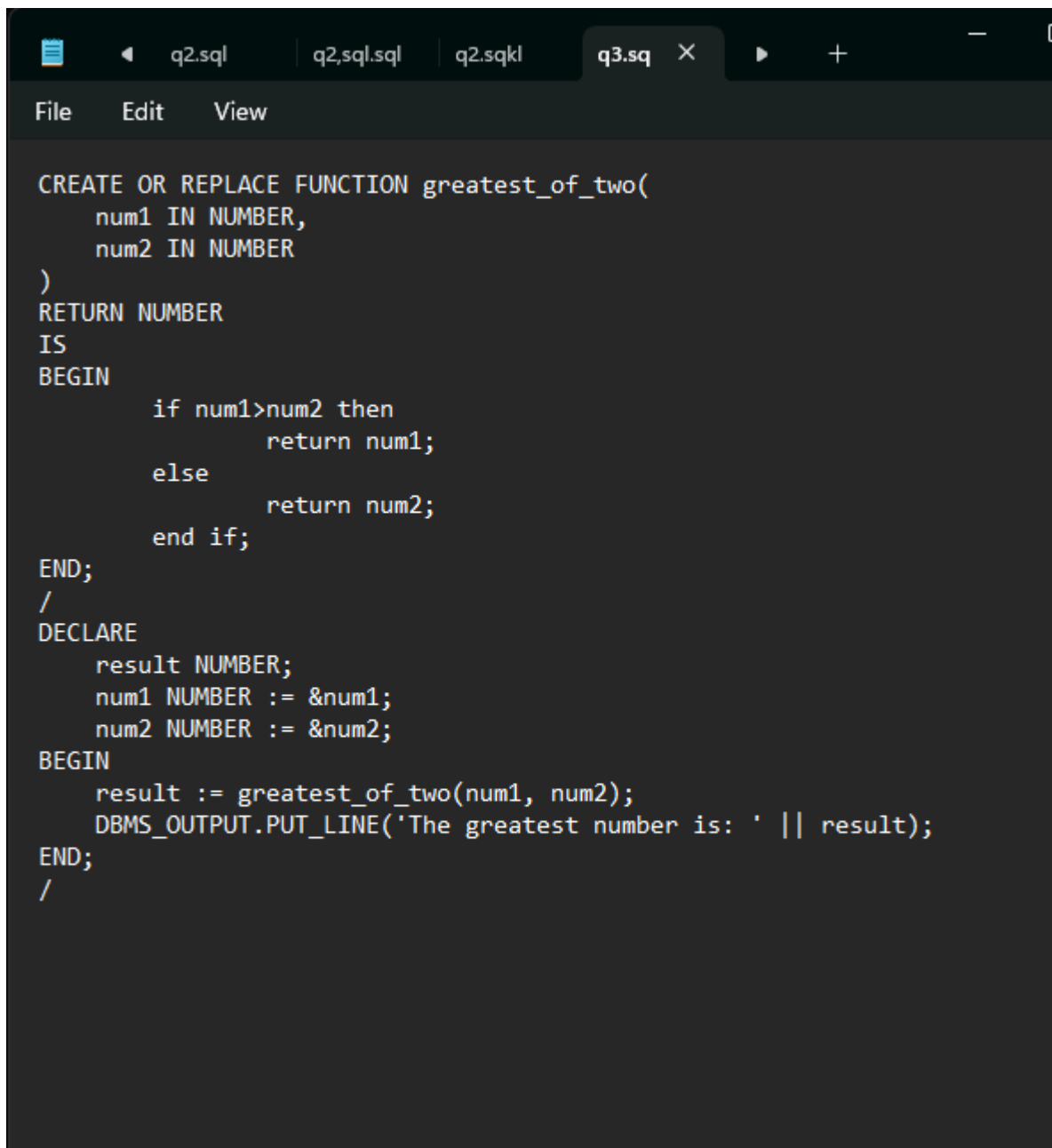
```sql
CREATE OR REPLACE FUNCTION greatest_of_two(
    num1 IN NUMBER,
    num2 IN NUMBER
)
RETURN NUMBER
IS
BEGIN
        if num1>num2 then
                return num1;
        else
                return num2;
        end if;
END;
/
DECLARE
    result NUMBER;
    num1 NUMBER := &num1;
    num2 NUMBER := &num2;
BEGIN
    result := greatest_of_two(num1, num2);
    DBMS_OUTPUT.PUT_LINE('The greatest number is: ' || result);
END;
/
```

Trigger which copies values into table when inserted into the first table

```
SQL> CREATE TABLE source_table (id NUMBER PRIMARY KEY,name VARCHAR2(100),value NUMBER);

Table created.

SQL> CREATE TABLE target_table (id NUMBER PRIMARY KEY,name VARCHAR2(100),value NUMBER);

Table created.

SQL> ed q4.sql

SQL> @ q4.sql

Trigger created.

SQL> INSERT INTO source_table (id, name, value) VALUES (1, 'Sample Name', 123);

1 row created.

SQL> SELECT * FROM target_table;

        ID
-----------
NAME
--------------------------------------------------------------------------------
     VALUE
-----------
         1
Sample Name
       123


SQL>
```

q2,sql.sql | q2.sqkl | q3.sql | **q4.sq** ✕ | ▶ | +

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```sql
CREATE OR REPLACE TRIGGER trg_after_insert_source
AFTER INSERT ON source_table
FOR EACH ROW
BEGIN
    INSERT INTO target_table (id, name, value)
    VALUES (:NEW.id, :NEW.name, :NEW.value);
END;
/
```