DECLARE

-- Declare a variable to store the input number

v\_number NUMBER;

v\_factorial NUMBER := 1;

-- User-defined exception for negative numbers

e\_negative\_number EXCEPTION;

PRAGMA EXCEPTION\_INIT(e\_negative\_number, -20002);

BEGIN

-- Accept input for number (for factorial calculation)

v\_number := &input\_number;

-- Check if the number is negative

IF v\_number < 0 THEN

RAISE e\_negative\_number;

END IF;

-- Calculate the factorial using a FOR loop

FOR i IN 1..v\_number LOOP

v\_factorial := v\_factorial \* i;

END LOOP;

-- Display the factorial result

DBMS\_OUTPUT.PUT\_LINE('The factorial of ' || v\_number || ' is ' || v\_factorial);

EXCEPTION

-- Handle the case where the number is negative

WHEN e\_negative\_number THEN

DBMS\_OUTPUT.PUT\_LINE('Error: Factorial is not defined for negative numbers.');

-- Handle any other unforeseen exceptions

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('An error occurred: ' || SQLERRM);

END;

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