Write and execute basic PI/SQL programs - simple program, condition statements and loops.

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```
SQL> SET SERVEROUTPUT ON;
SQL>
SQL> BEGIN
  2     DBMS_OUTPUT.PUT_LINE('Hello, PL/SQL!');
  3  END;
  4  /
Hello, PL/SQL!

PL/SQL procedure successfully completed.

SQL>
SQL> DECLARE
  2     num NUMBER := -5;
  3  BEGIN
  4     IF num > 0 THEN
  5        DBMS_OUTPUT.PUT_LINE('The number is positive.');
  6     ELSIF num < 0 THEN
  7        DBMS_OUTPUT.PUT_LINE('The number is negative.');
  8     ELSE
  9        DBMS_OUTPUT.PUT_LINE('The number is zero.');
 10     END IF;
 11  END;
 12  /
The number is negative.

PL/SQL procedure successfully completed.

SQL>  BEGIN
  2     FOR i IN 1..5 LOOP
  3        DBMS_OUTPUT.PUT_LINE('Number: ' || i);
  4     END LOOP;
  5  END;
  6  /
Number: 1
Number: 2
Number: 3
Number: 4
Number: 5

PL/SQL procedure successfully completed.

SQL> DECLARE
  2     i NUMBER := 1;
  3  BEGIN
  4     WHILE i <= 5 LOOP
  5        DBMS_OUTPUT.PUT_LINE('Number: ' || i);
  6        i := i + 1;
  7     END LOOP;
  8  END;
  9  /
Number: 1
Number: 2
Number: 3
```

```
Number: 2
Number: 3
Number: 4
Number: 5

PL/SQL procedure successfully completed.

SQL> DECLARE
  2     i NUMBER := 1;
  3  BEGIN
  4     LOOP
  5        EXIT WHEN i > 5;
  6        DBMS_OUTPUT.PUT_LINE('Number: ' || i);
  7        i := i + 1;
  8     END LOOP;
  9  END;
 10  /
Number: 1
Number: 2
Number: 3
Number: 4
Number: 5

PL/SQL procedure successfully completed.
```

```
SQL> SET SERVEROUTPUT ON;
SQL>
SQL> DECLARE
  2     radius NUMBER := 5;  -- Set the radius here
  3     area NUMBER;
  4  BEGIN
  5     area := 3.14159 * radius * radius;  -- Area formula: π * r^2
  6     DBMS_OUTPUT.PUT_LINE('The area of the circle with radius ' || radius || ' is: ' || area);
  7  END;
  8  /
The area of the circle with radius 5 is: 78.53975

PL/SQL procedure successfully completed.

SQL>
SQL> SET SERVEROUTPUT ON;
SQL>
SQL> DECLARE
  2     length NUMBER := 12;   -- Set the length of the rectangle
  3     width NUMBER := 6;     -- Set the width of the rectangle
  4     area NUMBER;
  5  BEGIN
  6     area := length * width;  -- Area formula: length * width
  7     DBMS_OUTPUT.PUT_LINE('The area of the rectangle with length ' || length || ' and width ' ||
width || ' is: ' || area);
  8  END;
  9  /
The area of the rectangle with length 12 and width 6 is: 72

PL/SQL procedure successfully completed.
```