# Control Structures

## Conditional Control – IF Statements

DECLARE

marks NUMBER := 85;

BEGIN

IF marks >= 90 THEN

DBMS\_OUTPUT.PUT\_LINE('Grade: A');

ELSIF marks >= 75 THEN

DBMS\_OUTPUT.PUT\_LINE('Grade: B');

ELSE

DBMS\_OUTPUT.PUT\_LINE('Grade: C');

END IF;

END;

## Looping Control – LOOP, WHILE, FOR

DECLARE

i NUMBER := 1;

BEGIN

LOOP

DBMS\_OUTPUT.PUT\_LINE('Value of i: ' || i);

i := i + 1;

EXIT WHEN i > 5;

END LOOP;

END;

# WHILE LOOP

DECLARE

i NUMBER := 1;

BEGIN

WHILE i <= 5 LOOP

DBMS\_OUTPUT.PUT\_LINE('Value: ' || i);

i := i + 1;

END LOOP;

END;

# FOR LOOP

BEGIN

FOR i IN 1..5 LOOP

DBMS\_OUTPUT.PUT\_LINE('Iteration: ' || i);

END LOOP;

END;

# Branching – GOTO

DECLARE

i NUMBER := 1;

BEGIN

<<start\_loop>>

DBMS\_OUTPUT.PUT\_LINE('i: ' || i);

i := i + 1;

IF i <= 3 THEN

GOTO start\_loop;

END IF;

END;

# Stored Procedures in PL/SQL

## Procedure to Calculate Square of a Number

CREATE OR REPLACE PROCEDURE find\_square (

num IN NUMBER,

result OUT NUMBER

)

IS

BEGIN

result := num \* num;

END find\_square;

## Calling a Stored Procedure (From Anonymous Block)

DECLARE

input NUMBER := 5;

output NUMBER;

BEGIN

find\_square(input, output);

DBMS\_OUTPUT.PUT\_LINE('Square: ' || output);

END;