Week 3 –Practical Activity

- Iterative Control - Loops

```
DECLARE
v_counter BINARY_INTEGER := 0;
BEGIN
LOOP
— increment loop counter by one
v_counter := v_counter + 1;
DBMS_OUTPUT.PUT_LINE (‘v_counter = ‘||v_counter);
— if exit condition yields TRUE exit the loop
IF v_counter = 5
THEN
EXIT;
END IF;
END LOOP;
— control resumes here
DBMS_OUTPUT.PUT_LINE (‘Done…’);
END;
```

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```
DECLARE
v_counter BINARY_INTEGER := 0;
BEGIN
LOOP
— increment loop counter by one
v_counter := v_counter + 1;
— if exit condition yields TRUE exit the loop
IF v_counter = 5
THEN
EXIT;
END IF;
DBMS_OUTPUT.PUT_LINE ('v_counter = '||v_counter);
END LOOP;
— control resumes here
DBMS_OUTPUT.PUT_LINE ('Done…');
END;
```

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```
DECLARE
v_counter BINARY_INTEGER := 0;
```

```
BEGIN
LOOP
— increment loop counter by one
v_counter := v_counter + 1;
DBMS_OUTPUT.PUT_LINE ('v_counter = '||v_counter);
— if exit condition yields TRUE exit the loop
EXIT WHEN v_counter = 5;
END LOOP;
— control resumes here
DBMS_OUTPUT.PUT_LINE ('Done…');
END;
```

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```
DECLARE
v_counter NUMBER := 5;
BEGIN
WHILE v_counter < 5
LOOP
DBMS_OUTPUT.PUT_LINE ('v_counter = '||v_counter);
— decrement the value of v_counter by one
v_counter := v_counter - 1;
```

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END LOOP;
END;
```

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Numeric For Loop

```
BEGIN
FOR v_counter IN 1..5
LOOP
DBMS_OUTPUT.PUT_LINE ('v_counter = '||v_counter);
END LOOP;
END;
```

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```
BEGIN
FOR v_counter IN 1..5
LOOP
DBMS_OUTPUT.PUT_LINE ('v_counter = '||v_counter);
END LOOP;
DBMS_OUTPUT.PUT_LINE ('Counter outside the loop is
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'||v_counter);
END;

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BEGIN
FOR v_counter IN REVERSE 1..5
LOOP
DBMS_OUTPUT.PUT_LINE ('v_counter = '||v_counter);
END LOOP;
END;

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BEGIN
FOR v_counter IN 1..5
LOOP
DBMS_OUTPUT.PUT_LINE ('v_counter = '||v_counter);
EXIT WHEN v_counter = 3;
END LOOP;
END;
```

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Nested Loop

```
DECLARE
v_counter1 BINARY_INTEGER := 0;
v_counter2 BINARY_INTEGER;
BEGIN
WHILE v_counter1 < 3
LOOP
DBMS_OUTPUT.PUT_LINE ('v_counter1: '||v_counter1);
v_counter2 := 0;
LOOP
DBMS_OUTPUT.PUT_LINE (' v_counter2: '||v_counter2);
v_counter2 := v_counter2 + 1;
EXIT WHEN v_counter2 >= 2;
END LOOP;
v_counter1 := v_counter1 + 1;
END LOOP;
END;
```

```
v_counter NUMBER := 1;
BEGIN
WHILE v_counter < 5
LOOP
DBMS_OUTPUT.PUT_LINE ('v_counter = '||v_counter);
— decrement the value of v_counter by one
v_counter := v_counter - 1;
END LOOP;
END;

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DECLARE
v_counter NUMBER := 1;
BEGIN
WHILE v_counter < 5
LOOP
DBMS_OUTPUT.PUT_LINE ('v_counter = '||v_counter);
— increment the value of v_counter by one
v_counter := v_counter + 1;
END LOOP;
END;
```

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```
DECLARE
v_counter NUMBER := 1;
BEGIN
WHILE v_counter <= 5
LOOP
DBMS_OUTPUT.PUT_LINE ('v_counter = '||v_counter);
IF v_counter = 2
THEN
EXIT;
END IF;
v_counter := v_counter + 1;
END LOOP;
END;
```

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