

Week 2 -Practice

IF THEN

```
SET SERVEROUTPUT ON;
DECLARE
v_num1 NUMBER := 5;
v_num2 NUMBER := 3;
v_temp NUMBER;
BEGIN
-- if v_num1 is greater than v_num2 rearrange their values
IF v_num1 > v_num2
THEN
v_temp := v_num1;
v_num1 := v_num2;
v_num2 := v_temp;
END IF;
--display the values of v_num1 and v_num2
DBMS_OUTPUT.PUT_LINE ('v_num1 = '||v_num1);
DBMS_OUTPUT.PUT_LINE ('v_num2 = '||v_num2);
END;
```

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IF THEN ELSE

```
SET SERVEROUTPUT ON;
DECLARE
v_num NUMBER := &sv_user_num;
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```

BEGIN
--test if the number provided by the user is even
IF MOD(v_num,2) = 0
THEN
DBMS_OUTPUT.PUT_LINE (v_num||' is even number');
ELSE
DBMS_OUTPUT.PUT_LINE (v_num||'is odd number');
END IF;
END;

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SET SERVEROUTPUT ON;
DECLARE
v_num1 NUMBER := 0;
v_num2 NUMBER;
BEGIN
DBMS_OUTPUT.PUT_LINE ('Before IF statement...');
IF v_num1 = v_num2
THEN
DBMS_OUTPUT.PUT_LINE ('v_num1 = v_num2');
ELSE
DBMS_OUTPUT.PUT_LINE ('v_num1 != v_num2');
END IF;
DBMS_OUTPUT.PUT_LINE ('After IF statement...');
END;

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SET SERVEROUTPUT ON;

```

```

DECLARE
v_num NUMBER := &sv_num;
BEGIN
DBMS_OUTPUT.PUT_LINE ('Before IF statement');
IF v_num < 0
THEN
DBMS_OUTPUT.PUT_LINE (v_num||' is a negative number');
ELSIF v_num = 0
THEN
DBMS_OUTPUT.PUT_LINE (v_num||' is equal to zero');
ELSE
DBMS_OUTPUT.PUT_LINE (v_num||' is a positive number');
END IF;
DBMS_OUTPUT.PUT_LINE ('After IF statement');
END;

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SET SERVEROUTPUT ON;
DECLARE
v_num1 NUMBER := &sv_num1;
v_num2 NUMBER := &sv_num2;
v_total NUMBER;
BEGIN
IF v_num1 > v_num2
THEN
DBMS_OUTPUT.PUT_LINE ('IF part of the outer IF');
v_total := v_num1 - v_num2;

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ELSE
DBMS_OUTPUT.PUT_LINE ('ELSE part of the outer IF');
v_total := v_num1 + v_num2;
IF v_total < 0
THEN
DBMS_OUTPUT.PUT_LINE ('Inner IF');
v_total := v_total * (-1);
END IF;
END IF;
DBMS_OUTPUT.PUT_LINE ('v_total = '||v_total);
END;

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NESTED IF

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SET SERVEROUTPUT ON;
DECLARE
v_letter CHAR(1) := '&sv_letter';
BEGIN
IF (v_letter >='A' AND v_letter <= 'Z') OR
(v_letter >= 'a' AND v_letter <= 'z')
THEN
DBMS_OUTPUT.PUT_LINE ('This is a letter');
ELSE
    DBMS_OUTPUT.PUT_LINE ('This is not a letter');
    IF v_letter BETWEEN '0' and '9'
    THEN
        DBMS_OUTPUT.PUT_LINE ('This is a number');
    ELSE

```

```
DBMS_OUTPUT.PUT_LINE ('This is not a number');  
END IF;  
END IF;  
END;
```

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#####
```

Case Statements;

```
SET SERVEROUTPUT ON;  
DECLARE  
v_num NUMBER := &sv_user_num;  
v_num_flag NUMBER;  
BEGIN  
v_num_flag := MOD(v_num,2);  
-- test if the number provided by the user is even  
CASE v_num_flag  
WHEN 0  
THEN  
DBMS_OUTPUT.PUT_LINE (v_num||'is even number');  
ELSE  
DBMS_OUTPUT.PUT_LINE (v_num||' is odd number');  
END CASE;  
END;
```

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#####
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```
SET SERVEROUTPUT ON;  
DECLARE
```

```
v_num NUMBER := &sv_user_num;  
v_remainder NUMBER;  
BEGIN  
-- calculate the remainder and if it is zero return NULL  
v_remainder := NULLIF(MOD(v_num, 2),0);  
DBMS_OUTPUT.PUT_LINE ('v_remainder:'||v_remainder);  
END;
```