

DBMS Lab



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Section: A1

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Assignment – 4A

IT-UG2

1. Write a PL/SQL code to print Today is fall on weekend or weekdays using if else statement.

Declare

todays_date DATE;

current_day varchar(9);

Begin

todays_date :=sysdate;

current_day:=to_char(todays_date,'day');

current_day:=initcap(current_day);

current_day:=rtrim(current_day);

if current_day='Sunday' or current_day='Saturday' then

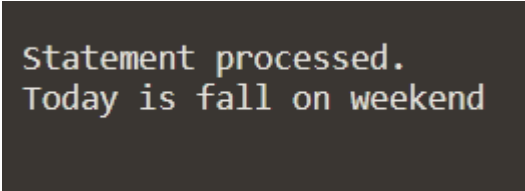
dbms_output.put_line('Today is fall on weekend');

Else

dbms_output.put_line('Today is fall on weekdays');

end if;

end;



```
Statement processed.  
Today is fall on weekend
```

2. Write a PL/SQL code to check that an inputted a single character is vowel or not .If vowel then display which vowel it is.

DECLARE

input_char CHAR(1);

is_vowel BOOLEAN;

BEGIN

```
input_char := 'S';  
is_vowel := UPPER(input_char) IN ('A', 'E', 'I', 'O', 'U');  
  
IF is_vowel THEN  
    DBMS_OUTPUT.PUT_LINE(input_char || ' is a vowel.');
```

ELSE

```
    DBMS_OUTPUT.PUT_LINE(input_char || ' is not a vowel.');
```

END IF;

END;

```
Statement processed.  
S is not a vowel.
```

3. Write a PL/SQL code block to find out the sum of first twenty natural numbers (1+2+3+4+5+6+7+8+9+10+-----+20 this series).

```
DECLARE  
    v_sum NUMBER := 0;  
  
BEGIN  
    FOR i IN 1..20 LOOP  
        v_sum := v_sum + i;  
    END LOOP;  
  
    DBMS_OUTPUT.PUT_LINE('Sum : ' || v_sum);  
  
END;
```

```
Statement processed.  
Sum : 210
```

4. Write a PL/SQL block that will ask for two numbers and one operand (+, -, *, /). Then it will calculate and display the result.

DECLARE

v_num1 NUMBER := 10; -- Change this value to & for SQL+

v_num2 NUMBER := 5; -- Change this value to & for SQL+

v_operator CHAR(1) := '+';

v_result NUMBER;

BEGIN

IF v_operator = '+' THEN

v_result := v_num1 + v_num2;

ELSIF v_operator = '-' THEN

v_result := v_num1 - v_num2;

ELSIF v_operator = '*' THEN

v_result := v_num1 * v_num2;

ELSIF v_operator = '/' THEN

IF v_num2 != 0 THEN

v_result := v_num1 / v_num2;

ELSE

DBMS_OUTPUT.PUT_LINE('Error: Division by zero.');

RETURN;

END IF;

ELSE

DBMS_OUTPUT.PUT_LINE('Error: Invalid operator.');

RETURN;

END IF;

DBMS_OUTPUT.PUT_LINE('The result of ' || v_num1 || ' ' || v_operator || ' ' || v_num2 || ' ' || v_result);

END;

```
Statement processed.  
The result of 10 + 5 is: 15
```

5. Write a PL/SQL code block to display a number in a reverse way.

```
DECLARE
```

```
    original_number NUMBER := 12345;
```

```
    reversed_number NUMBER := 0;
```

```
BEGIN
```

```
    WHILE original_number > 0 LOOP
```

```
        reversed_number := reversed_number * 10 + MOD(original_number, 10);
```

```
        original_number := FLOOR(original_number / 10);
```

```
    END LOOP;
```

```
    DBMS_OUTPUT.PUT_LINE('Reversed Number: ' || reversed_number);
```

```
END;
```

```
Statement processed.  
Reversed Number: 54321
```

6. Write a PL/SQL block to display the dates of this month which are Tuesday.

```
DECLARE
```

```
    v_date DATE := TRUNC(SYSDATE, 'MM'); -- Start from the first day of the current  
month
```

```
BEGIN
```

```
    DBMS_OUTPUT.PUT_LINE('Tuesdays of this month:');
```

```
    WHILE v_date < LAST_DAY(SYSDATE) LOOP
```

```
        IF TO_CHAR(v_date, 'DY') = 'TUE' THEN
```

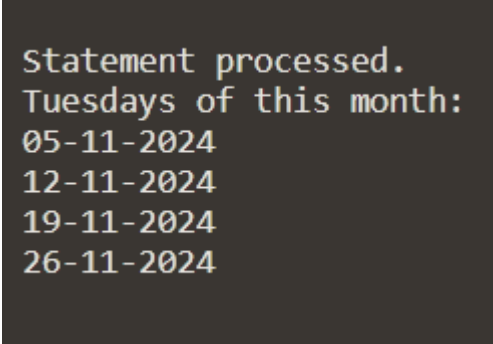
```
            DBMS_OUTPUT.PUT_LINE(TO_CHAR(v_date, 'DD-MM-YYYY'));  
        v_date := v_date + 1;
```

```
END IF;

v_date := v_date + 1; -- Move to the next day

END LOOP;

END;
```



```
Statement processed.
Tuesdays of this month:
05-11-2024
12-11-2024
19-11-2024
26-11-2024
```

7. Write a program in PL/SQL to print the prime numbers between 1 to 50.

```
declare

s NUMBER := 0;

f NUMBER :=0;

begin

for i in 1..50 LOOP

    f:=0;

    for j in 2..i/2 LOOP

        if MOD(i,j)=0 then

            f:=1;

        end if;

    end LOOP;

    if f=0 then

        dbms_output.put_line(i || ' is Prime');

    end if;

end;
```

```
end LOOP;
```

```
End;
```

```
Statement processed.  
1 is Prime  
2 is Prime  
3 is Prime  
5 is Prime  
7 is Prime  
11 is Prime  
13 is Prime  
17 is Prime  
19 is Prime  
23 is Prime  
29 is Prime  
31 is Prime  
37 is Prime  
41 is Prime  
43 is Prime  
47 is Prime
```

8. Write a program in PL/SQL to print the sum of digits of a number [eg: 635=14].

```
declare
```

```
num NUMBER:=325;
```

```
res NUMBER:=0;
```

```
begin
```

```
while num>0 LOOP
```

```
    res:=res + MOD(num,10);
```

```
    num:=FLOOR(num/10);
```

```
end LOOP;
```

```
dbms_output.put_line('result is = ' || res);
```

```
end;
```

```
Statement processed.  
result is = 10
```