**DBMS Lab**



Name: **Soham Das**

Section: **A1**

Roll No: **002311001004**

**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;

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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;

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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;

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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 || ' is: ' || v\_result);

END;

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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;

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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'));

     END IF;

     v\_date := v\_date + 1;  -- Move to the next day

END LOOP;

END;

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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 LOOP;

End;

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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;

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