Name: Sarthak Jain

Programme: B.Tech CSE (Spec. AI&ML) (Batch 5) Course: Advanced Database Management Systems

LAB 9

Title: To understand the concepts of PL/SQL programming.

Objective: Students will be able to implement the basic concepts of Pl/SQL.

1. Write a PL/SQL code to accept the value of A, B & C display which is greater.

Ans.1.

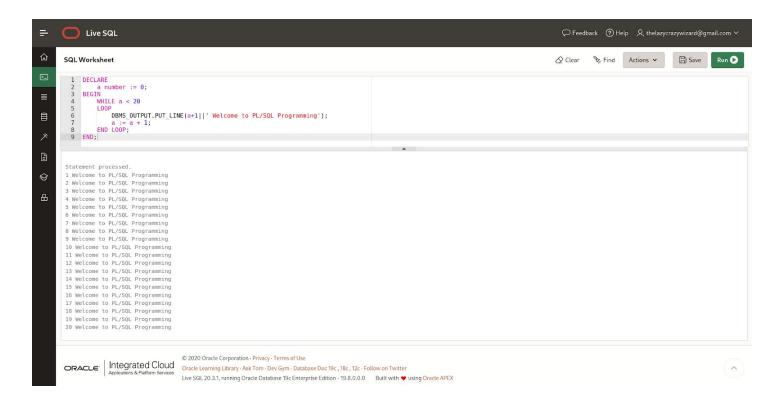
```
declare
a number:=3;
b number:=4:
c number:=12;
begin
dbms_output_line('a='||a||' b='||b||' c='||c);
if a > b and a > c then
dbms output.put line('a is the greatest');
else
if b > a and b > c then
      dbms output.put line('b is the greatest');
 else
      dbms output.put line('c is the greatest');
end if:
end if;
end;
```



2. Using PL/SQL Statements create a simple loop that display message "Welcome to PL/SQL Programming" 20 times.

Ans.2.

```
DECLARE
a number := 0;
BEGIN
WHILE a < 20
LOOP
    DBMS_OUTPUT.PUT_LINE(a+1||' Welcome to PL/SQL Programming');
a := a + 1;
END LOOP;
END;
```



3. Write a PL/SQL code block to find the factorial of a number.

Ans.3.

```
DECLARE

n number := 8;

a number := 1;

factorial_result number := 1;

BEGIN

WHILE a <= n

LOOP

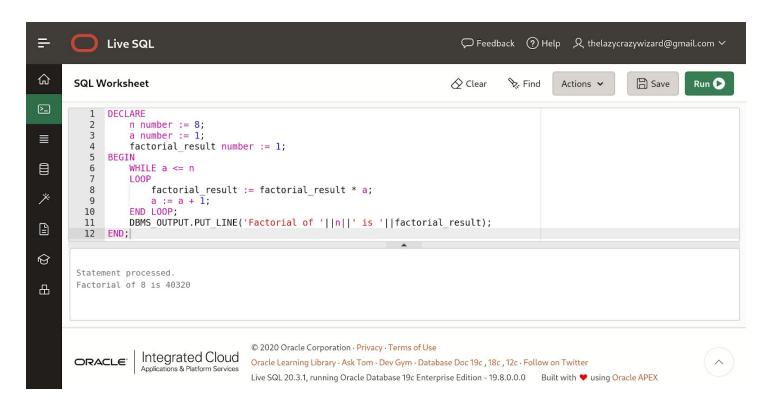
factorial_result := factorial_result * a;

a := a + 1;

END LOOP;

DBMS_OUTPUT.PUT_LINE('Factorial of '||n||' is '||factorial_result);

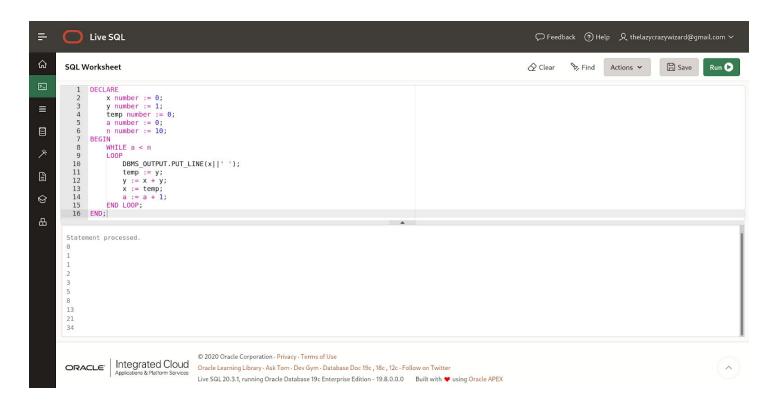
END;
```



4. Write a PL/SQL program to generate Fibonacci series.

Ans.4.

```
DECLARE
x number := 0;
y number := 1;
temp number := 0;
a number := 0;
n number := 10;
BEGIN
WHILE a < n
LOOP
      DBMS_OUTPUT.PUT_LINE(x||' ');
     temp := y;
     y := x + y;
     x := temp;
     a := a + 1;
END LOOP;
END;
```



5. Write a PL/SQL code to find the sum of first N numbers.

Ans.5.

```
DECLARE

sum_result number := 0;

a number := 0;

n number := 8;

BEGIN

WHILE a <= n

LOOP

sum_result := sum_result + a;

a := a + 1;

END LOOP;

DBMS_OUTPUT.PUT_LINE('SUM upto '||n||' is '||sum_result);

END;
```

```
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>_
           DECLARE
              sum result number := 0;
        3
              a number := 0;
\equiv
              n number := 8;
        4
        5 BEGIN
6
              WHILE a <= n
        7
              L00P
        8
                  sum result := sum result + a;
涔
        9
                  a := a + 1;
              END LOOP;
       10
              DBMS OUTPUT.PUT LINE('SUM upto '||n||' is '||sum result);
       11
\Diamond
      Statement processed.
凸
      SUM upto 8 is 36
```