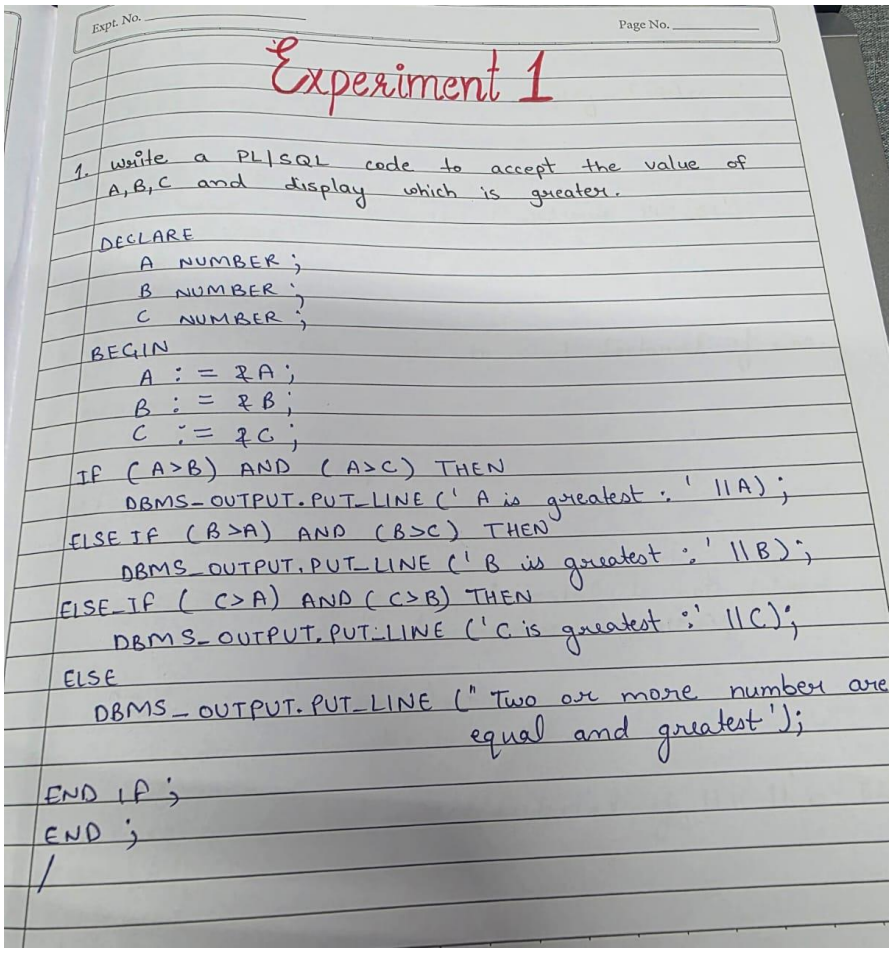
EXPERIMENT 1

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



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Experiment 1

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

```
DECLARE
    A NUMBER;
    B NUMBER;
    C NUMBER;
BEGIN
    A := &A;
    B := &B;
    C := &C;
IF (A>B) AND (A>C) THEN
    DBMS_OUTPUT.PUT_LINE ('A is greatest :' ||A);
ELSE IF (B>A) AND (B>C) THEN
    DBMS_OUTPUT.PUT_LINE ('B is greatest :' ||B);
ELSE_IF (C>A) AND (C>B) THEN
    DBMS_OUTPUT.PUT_LINE ('C is greatest :' ||C);
ELSE
    DBMS_OUTPUT.PUT_LINE ("Two or more number are
                           equal and greatest');
END IF;
END;
/
```

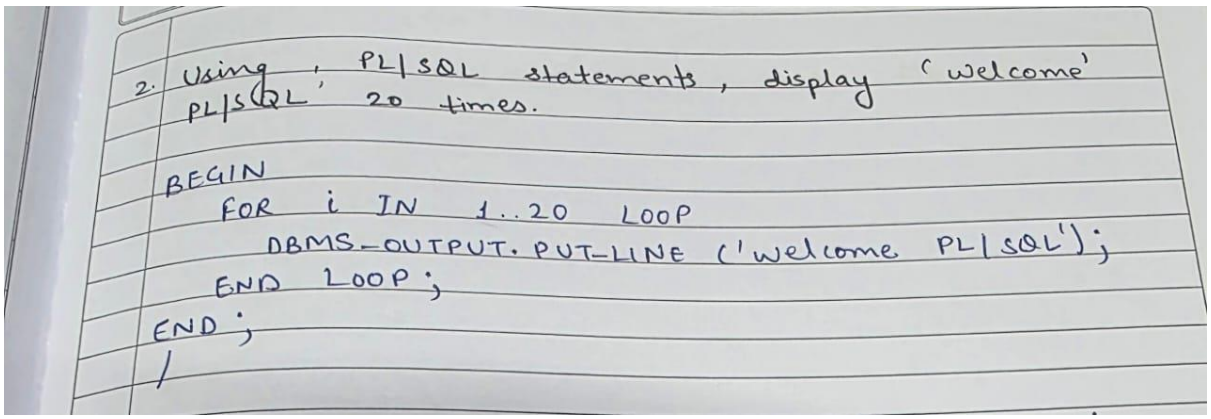
```
DECLARE
    A NUMBER;
    B NUMBER;
    C NUMBER;
    D NUMBER;
BEGIN
    A := 50;
    B := 12;
    C := 34;
    D := 90;

    IF (A > B) AND (A > C) AND (A > D) THEN
        DBMS_OUTPUT.PUT_LINE('A is greatest: ' || A);
    ELSIF (B > A) AND (B > C) AND (B > D) THEN
        DBMS_OUTPUT.PUT_LINE('B is greatest: ' || B);
    ELSIF (C > A) AND (C > B) AND (C > D) THEN
```

```
    ELSIF (C > A) AND (C > B) AND (C > D) THEN
        DBMS_OUTPUT.PUT_LINE('C is greatest: ' || C);
    ELSIF (D > A) AND (D > B) AND (D > C) THEN
        DBMS_OUTPUT.PUT_LINE('D is greatest: ' || D);
    ELSE
        DBMS_OUTPUT.PUT_LINE('Two or more numbers are equal and greatest');
    END IF;
END;
/
```

```
D is greatest: 90
```

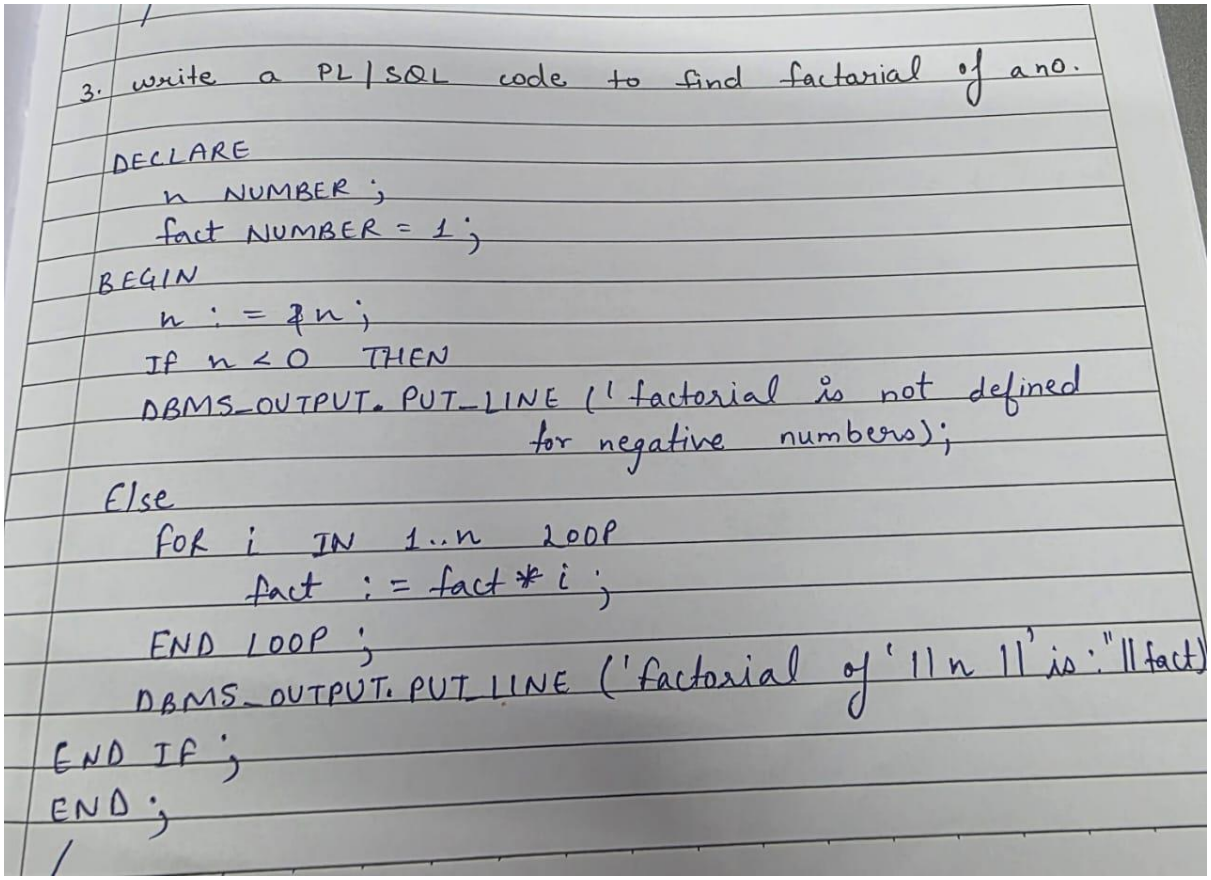
2. Using PL/SQL Statements create a simple loop that display message “Welcome to PL/SQL Programming” 20 times.




```
BEGIN
    FOR i  IN 1..20 LOOP
      DBMS_OUTPUT.PUT_LINE('WELCOME PL/SQL');
    END LOOP;
END;
/
```

```
WELCOME PL/SQL
WELCOME PL/SQL
WELCOME PL/SQL
WELCOME PL/SQL
WELCOME PL/SQL
WELCOME PL/SQL
WELCOME PL/SQL
WELCOME PL/SQL
WELCOME PL/SQL
```

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



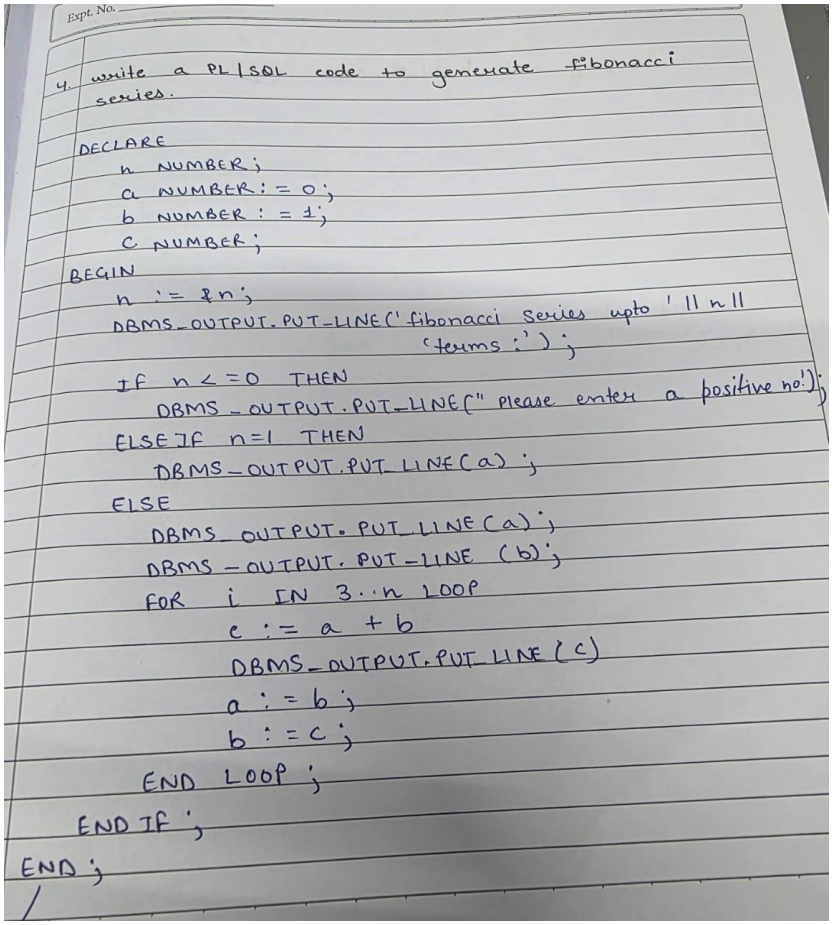
```
3. write a PL/SQL code to find factorial of a no.

DECLARE
   n NUMBER;
   fact NUMBER := 1;
BEGIN
   n := &n;
   IF n < 0 THEN
   DBMS_OUTPUT.PUT_LINE ('factorial is not defined
                         for negative numbers);
   Else
      FOR i IN 1..n LOOP
         fact := fact * i;
      END LOOP;
      DBMS_OUTPUT.PUT_LINE ('factorial of 'll n ll' is :'ll fact)
END IF;
END;
/
```

```
DECLARE
    n NUMBER;
    fact NUMBER := 1;
BEGIN
    n := 5;
    IF n < 0 THEN
        DBMS_OUTPUT.PUT_LINE('Factorial is not defined for negative numbers');
    ELSE
        FOR i IN 1..n LOOP
            fact := fact * i;
        END LOOP;
        DBMS_OUTPUT.PUT_LINE('Factorial of ' || n || ' is ' || fact);
    END IF;
END;
/
```

```
Factorial of 5 is 120
```

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



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4. write a PL/SQL code to generate fibonacci series.

```
DECLARE
    n NUMBER;
    a NUMBER := 0;
    b NUMBER := 1;
    c NUMBER;
BEGIN
    n := &n;
    DBMS_OUTPUT.PUT_LINE('fibonacci series upto ' || n ||
                         'terms :');
    IF n <= 0 THEN
        DBMS_OUTPUT.PUT_LINE(" Please enter a positive no.");
    ELSIF n=1 THEN
        DBMS_OUTPUT.PUT_LINE(a);
    ELSE
        DBMS_OUTPUT.PUT_LINE(a);
        DBMS_OUTPUT.PUT_LINE(b);
        FOR i IN 3..n LOOP
            c := a + b
            DBMS_OUTPUT.PUT_LINE(c)
            a := b;
            b := c;
        END LOOP;
    END IF;
END;
/
```

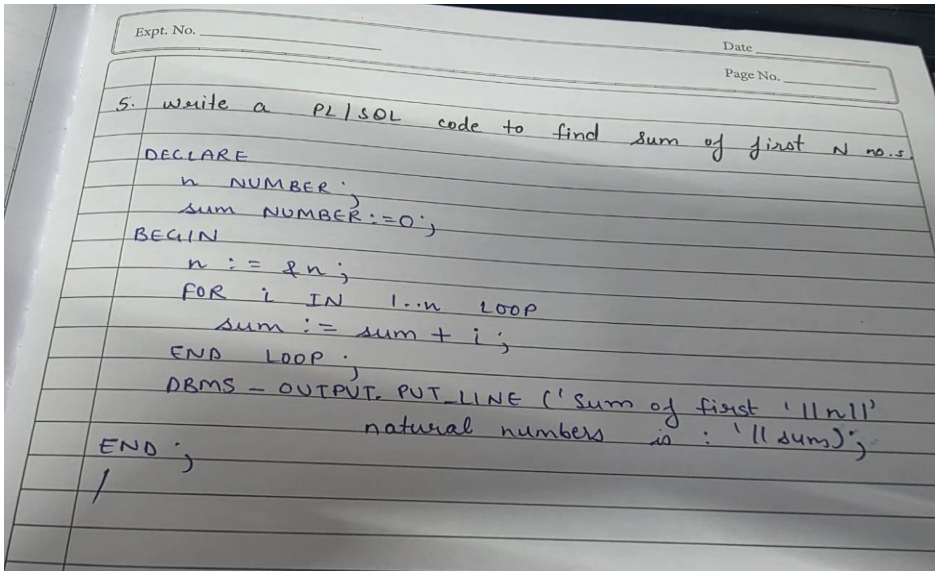
```
DECLARE
    a NUMBER := 0;
    b NUMBER := 1;
    c NUMBER;
    n NUMBER := 10;
BEGIN
    DBMS_OUTPUT.PUT_LINE('Fibonacci series up to ' || n || ' terms:');

    IF n <= 0 THEN
        DBMS_OUTPUT.PUT_LINE('Please enter a positive n');
    ELSIF n = 1 THEN
        DBMS_OUTPUT.PUT_LINE(a);
    ELSE
        DBMS_OUTPUT.PUT_LINE(a);
        DBMS_OUTPUT.PUT_LINE(b);
        FOR i IN 3..n LOOP
            c := a + b;
```

```
            c := a + b;
            DBMS_OUTPUT.PUT_LINE(c);
            a := b;
            b := c;
        END LOOP;
    END IF;
END;
/
```

```
1
2
3
5
8
13
21
34
```

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




```
DECLARE
    n NUMBER := 10;
    total NUMBER := 0;
BEGIN
    FOR i IN 1..n LOOP
        total := total + i;
    END LOOP;

    DBMS_OUTPUT.PUT_LINE('Sum of first ' || n || ' natural numbers is ' || total);
END;
/
```

```
Sum of first 10 natural numbers is 55
```