

[Experiment - 2]

1. WAP to find the greatest of 3 numbers.

```
CREATE OR REPLACE FUNCTION greatest.no(  
    x IN NUMBER,  
    y IN NUMBER,  
    z IN NUMBER  
) RETURN NUMBER IS
```

```
BEGIN
```

```
    IF (x >= y AND x >= z) THEN  
        RETURN x;
```

```
    ELSIF (y >= x AND y >= z) THEN  
        RETURN y;
```

```
    ELSE
```

```
        RETURN z;
```

```
    END IF;
```

```
END;
```

```
/
```

```
DECLARE
```

```
    a NUMBER;
```

```
    b NUMBER;
```

```
    c NUMBER;
```

```
    d NUMBER;
```

```
BEGIN
```

```
    a := &a;
```

```
    b := &b;
```

```
    c := &c;
```

```
    d := greatest.no(a, b, c);
```

```
    DBMS_OUTPUT.PUT_LINE('Greatest no = ' || d);
```

```
END;
```

Teacher's Signature \_\_\_\_\_

### Substitution Variables

A  
20

Cancel

OK

### Substitution Variables

B  
30

Cancel

OK

### Substitution Variables

C  
40

Cancel

OK

C is greatest: 40



2. WAP to print the text 20 times.

```
CREATE OR REPLACE FUNCTION welcome-msg RETURN return  
VARCHA2 IS
```

```
Counter NUMBER := 1;
```

```
BEGIN
```

```
    LOOP
```

```
        DBMS_OUTPUT.PUT_LINE('Welcome to PL/SQL');
```

```
        Counter := Counter + 1;
```

```
        EXIT WHEN Counter > 20;
```

```
    END LOOP;
```

```
    RETURN 'Message displayed 20 times!';
```

```
END;
```

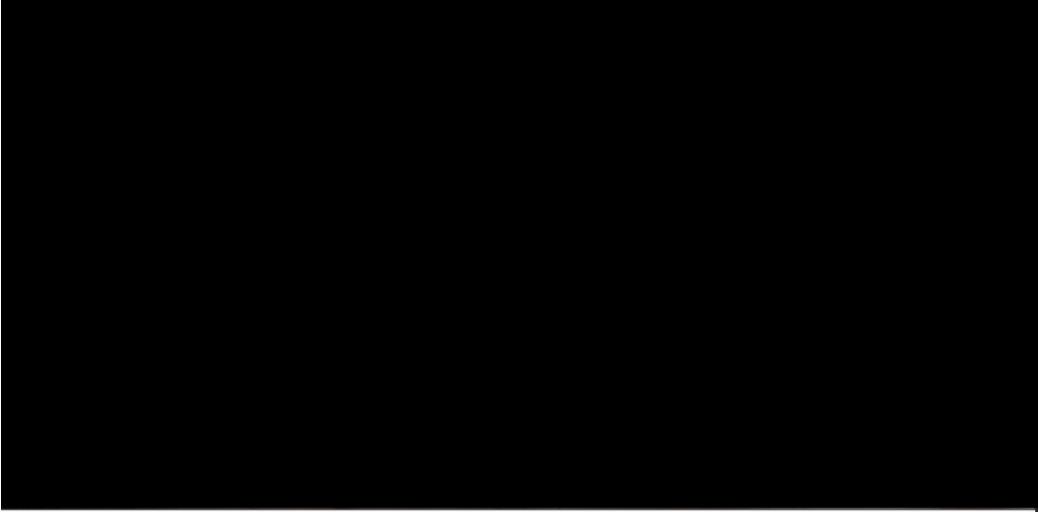
```
/
```

```
BEGIN
```

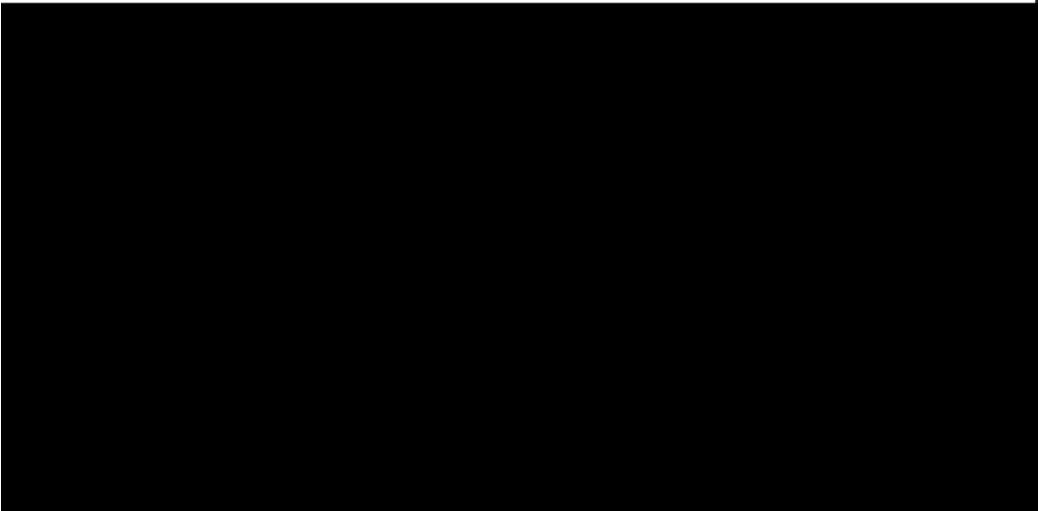
```
    DBMS_OUTPUT.PUT_LINE(welcome-msg);
```

```
END;
```

```
/
```



Welcome PL/SQL  
Welcome PL/SQL  
Welcome PL/SQL  
Welcome PL/SQL  
Welcome PL/SQL  
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Welcome PL/SQL





3. WAP to find factorial of a number.

```
CREATE OR REPLACE FUNCTION factorial (  
    n IN NUMBER
```

```
) RETURN NUMBER IS
```

```
fact NUMBER := 1;
```

```
BEGIN
```

```
    for i IN 1..n LOOP
```

```
        fact := fact * i;
```

```
    END LOOP;
```

```
    RETURN fact;
```

```
END;
```

```
/
```

```
DECLARE
```

```
n NUMBER;
```

```
BEGIN
```

```
    n := &n;
```

```
    DBMS-OUTPUT.PUT-LINE('factorial = ' || factorial(n));
```

```
END;
```

```
/
```

### Substitution Variables

n  
5

Cancel

OK

Factorial of 5 is 120



4. WAP to print Fibonacci Series

```
CREATE OR REPLACE FUNCTION fibonacci (  
    n IN NUMBER;
```

```
) RETURN VARCHAR2 IS
```

```
a NUMBER := 0;
```

```
b NUMBER := 1;
```

```
temp NUMBER;
```

```
BEGIN
```

```
    DBMS-OUTPUT.PUT-LINE ('Series: ');
```

```
    for i IN 1..n LOOP
```

```
        DBMS-OUTPUT.PUT-LINE(a);
```

```
        temp := a+b;
```

```
        a := b;
```

```
        b := temp;
```

```
    END LOOP;
```

```
    RETURN 'SUCCESS';
```

```
END;
```

```
/
```

```
DECLARE
```

```
n    NUMBER;
```

```
res  VARCHAR2(20);
```

```
BEGIN
```

```
    n := &n;
```

```
    res := fibonacci(n);
```

```
    DBMS-OUTPUT.PUT-LINE ('function returned: ' || res);
```

```
END;
```

```
/
```

### Substitution Variables

n  
5

Cancel

OK

Fibonacci Series:

0

1

1

2

3



5 WAP to compute sum of integers till n.

CREATE OR REPLACE FUNCTION SumofNos (  
n IN NUMBER

) RETURN NUMBER IS

Sum NUMBER ~~IS~~ := 0;

BEGIN

FOR i IN 1..n LOOP

Sum := Sum + i;

END LOOP;

RETURN Sum;

END;

/

DECLARE

n NUMBER;

BEGIN

n := &n;

DBMS-OUTPUT.PUT-LINE('Sum of nos. = ' || SumOfNos(n));

END;

/

Sum of first 10 numbers = 55

### Substitution Variables

<sup>n</sup>  
10|

Cancel

OK