EXERCISE 1

AIM: To Define a local procedure and calculate and display the sum of two numbers.
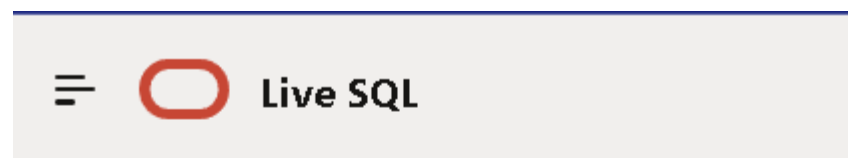
```
DECLARE

        procedure calculate_sum(num1 in number, num2 in number) is
        begin
                dbms_output.put_line('sum of '|| ' and ' || num2 || ' is: ' || (num1 + num2));
        end calculate_sum;

BEGIN
        calculate_sum(10, 20);
        calculate_sum(50, 30);
END;
```

OUTPUT:


```
Statement processed.
sum of  and 20 is: 30
sum of  and 30 is: 80
```

EXERCISE 2

AIM: to demonstrate a simple PL/SQL procedure that calculates the sum of two numbers and outputs the result.

```
create or replace procedure calculate_sum(
    num1 in number,
    num2 in number,
    result out number
) IS

begin
        result := num1 + num2;
end calculate_sum;
/
declare
        sum_result number;
begin
        calculate_sum(10, 20, sum_result);

        dbms_output.put_line('the sum is: ' || sum_result);
end;
```

OUTPUT:

SQL Worksheet

```
Procedure created.
```

SQL Worksheet

```
Statement processed.
the sum is: 30
```

EXERCISE 3

AIM: to demonstrate a PL/SQL procedure for dividing two numbers with error handling for division by zero.

```
create or replace procedure divide_numbers(
    num1 in number,
    num2 in number,
    result out number
) is
begin
        if num2 = 0 then
                        raise_application_error(-20001, 'Division by zero is not allowed');
        else
                result:= num1 / num2;
        end if;
exception
        when others then
                dbms_output.put_line('error: ' || sqlerrm);
end divide_numbers;
/
declare
        divide_result number;
begin
        divide_numbers(10, 20, divide_result);
        dbms_output.put_line('the division is:' || divide_result);
end;
```

OUTPUT:

```
Procedure created.

Statement processed.
the division is:.5
```

IF WE REPLACE DIVISOR BY ZERO THEN OUTPUT:

```
Procedure created.

Statement processed.
error: ORA-20001: Division by zero is not allowed
the division is:
```