

EXERCISE 1

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

DECLARE

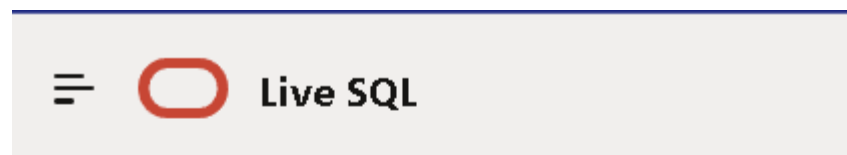
```
procedure calculate_sum(num1 in number, num2 in number) is  
begin  
    dbms_output.put_line('sum of ' || ' and ' || num2 || ' is: ' ||  
(num1 + num2));  
end calculate_sum;
```

BEGIN

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

END;

OUTPUT:



SQL Worksheet

```
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:



SQL Worksheet

Procedure created.

Statement processed.
the division is:.5

IF WE REPLACE DIVISOR BY ZERO THEN OUTPUT:



SQL Worksheet

Procedure created.

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