

# Challenge Lab 8

---

Below you will find a simple program which computes and displays the average of four user entered numbers. To complete this challenge lab you must do the following:

- 1) The compute statement below must be placed in a subroutine (form) **which makes use of an interface.**
  - a. You will need to decide which type of interface to use.
- 2) You may NOT use any actual parameters (highlighted below) in the subroutine!!! Your subroutine must use formal parameters only!!!
- 3) You may not add, move, or alter any WRITE statements (in other words, the WRITE statements must remain outside the subroutine)!!

\*----- parameters

PARAMETERS par\_num1(2) TYPE p.

PARAMETERS par\_num2(2) TYPE p.

PARAMETERS par\_num3(2) TYPE p.

PARAMETERS par\_num4(2) TYPE p.

\*----- variables

DATA calc\_result(6) TYPE p DECIMALS 2.

\*----- constants

CONSTANTS con\_num1(14) TYPE c VALUE 'Number One : '.

CONSTANTS con\_num2(14) TYPE c VALUE 'Number Two : '.

CONSTANTS con\_num3(14) TYPE c VALUE 'Number Three: '.

CONSTANTS con\_num4(14) TYPE c VALUE 'Number Four : '.

CONSTANTS con\_total(9) TYPE c VALUE 'Average: '.

\* ----- main program

\* perform the calculation

COMPUTE calc\_result = ( par\_num1 + par\_num2 + par\_num3 + par\_num4 ) / 4.

\* write the result to the report

WRITE: con\_num1, par\_num1.

WRITE: /, con\_num2, par\_num2.

WRITE: /, con\_num3, par\_num3.

WRITE: /, con\_num4, par\_num4.

WRITE: /, con\_total, calc\_result.