

TD 1

Exercise 1:

List the input/output elements for the following problems:

- 1- Displaying the average of a module.
- 2- [Displaying the square of a number.](#)
- 3- Swapping two numbers.
- 4- Calculating the area of a rectangle.
- 5- [Calculating the area of a circle.](#)

Exercise 2:

What are the correct names of the following variables, justify your answer:

Variable Name	Correct or Not	Justification
x		
X2		
2x		
X2y		
-x		
_x		
x-y		
begin		
xbegin		
Moy*enne		
if		
then		
integer		

Exercise 3:

What are the variables to declare, along with their types, for the following problems:

- 1- Average calculation of two modules with coefficients.
- 2- Sum of the number of students from different computer science classes.
- 3- Conversion between units of distance measurement (from cm to inch).
- 4- [Identification of individuals \(name, first name, date of birth, marital status, phone number,..\).](#)
- 5- [Identification of vehicles.](#)

Exercise 4:

Write algorithms to solve the following problems:

- 1- Swapping the values of two integer variables.
- 2- Calculating the average of two modules with coefficients.
- 3- Currency conversion (Algerian dinars to dollars)
- 4- [Conversion of time into hours, minutes, and seconds. \(Example: 1h15min13sec = 4513 sec; 75,22 min ; 1,253 h\).](#)