Tutorial Series N° 1

Ex 01

Describe the steps to calculate and display the perimeter of a circle given the user's input radius.

Ex 02

The formula for converting degrees Fahrenheit to degrees Celsius is as follows:

$$C \cong 0.55556 \times (F - 32)$$

Where:
- C is the temperature in degrees Celsius
- F is the temperature in degrees Fahrenheit

Analyze this problem and give the steps required to solve it.

Ex 03

The final grade for the Algorithmic and Data Structure (ASD) course is calculated as follows:

Final grade = Continuous assessment grade * 0.4 + Final exam grade * 0.6
where:
- Continuous assessment grade is the average of the homework grade and the lab grade.

Describe the steps to calculate the final grade for ASD, given the homework, lab, and final exam grades. The user enters these three grades.

Ex 04

The price of a cinema ticket is calculated according to the age of the customer:

1.   Under 12 years old: 100 DA
2.   Between 12 and 18 years old or over 65 years old: 250 DA
3.   Other: 500 DA

Analyze and give the steps to solve this problem.

Ex 05

Analyze and describe the steps to solve a quadratic equation.