Programming Practice I

Examples

Instructions: Type each of the following programs and then select run to execute them. They illustrate the main programming features needed to make computer programs, thus, observe carefully whatever appears on the screen.

Note: Each program must be saved in a different file, do not try to put all the programs one after another. Also, the programs provided are only images, so no copy and paste can be done.

Historically, every line in BASIC started with a number.

Assign initial value to variables.

Request data from the keyboard.

Send message to the screen.

To prevent confusions, multiplication is always indicated with an asterisk.

Connector: allows printing different data in the same line.

Counter

Condition: Is ans equal to 1?

Jump to instruction 20 if condition is met; otherwise, continue with the next line.

Variables to hold alphanumeric values must end with the sign $
Exercises

Instructions: For each of the following exercises, elaborate a program in BASIC using as reference the examples previously provided. In case of experiencing problems while making either the algorithm or the program, write down any difficulties you may have found.

1) Make a program to display a greeting.

2) Make a program to request a person’s name and greet that person.

3) Make a program to add any two numbers.

4) Make a program to calculate the hypotenuse of a triangle with sides 3 and 4.
   
   Hint: If $a = 3$ and $b = 4$, then $c = (a^2 + b^2)^{1/2}$

5) Make a program to calculate the hypotenuse of a triangle given any two sides.

6) Make a program to calculate the area for a triangle given the length and height.

7) Make a program to print the first 100 natural numbers.

8) Make a program to indicate if a number is positive or negative.