Algoritmo

* START
* Declare variables, char num, double x, double firstOp, double y, double secondop, double n, double a, double b, double c, double discriminant, double thirdop1, double thirdop2, long fifthop = 1.0, string exitop.
* Do while true
  + Print menú, 1. F(x) = x^2 + 5x + 6\n, 2. G(x, y) = xy – 4x(y – 5)\n, 3. Calculate the roots for x2 + 5x + 6\n, 4. Repeat the phrase “Hello World” – n times.\n, 6. Calculate the factorial of a number.\n, 4. Exit\n & Enter your choice (1-6):
  + Leer num
  + switch (num)
    - case 1:
      * clear screen
      * print \nType a number from 3 to 8 :
      * leer x
      * if (2 < x && x<=8)
        + Print \nThe solution is:
        + firstop = pow(x, 2) + 5\*x + 6;
        + Print firstop \n\n;
      * if it isn't 2 < x <= 8 sends error
        + Print "Error! Invalid number.\n\n"
      * Break
    - case 2:
      * clear screen
      * print "\nType a number from 3 to 8 : "
      * leer x
      * print "\nType a number from 2 to 8 : "
      * leer y
      * if (2 < x && x <= 8 && 9 > y && y >= 2)
        + print "\nThe solution is: ";
        + secondop = x\*y - 4\*x\*(y-5);
        + print secondop \n\n
      * else
        + print "Error! Invalid number.\n\n"
      * break
    - case 3:
      * clear screen
      * a = 1, b = 5, c = 6 & discriminant = pow(b, 2) - 4 \* a \* c
      * if (discriminant >= 0)
        + thirdop1 = (-b + sqrt(discriminant) / 2 \* a), thirdop2 = (-b - sqrt(discriminant) / 2 \* a)
        + print "The solution's to the equation is: " , thirdop1 , ", " , thirdop2
      * else
        + print "Error!!!Discriminant is negative."
      * break
    - case 4:
      * clear screen
      * print "Enter a number:"
      * leer n
      * if (n > 0)
        + for (int i = 1; i <= n; i++)

print "Hello World"

* + - * else
        + print Error! Number is a negative.
      * break
    - case 5:
      * clear screen
      * print "Enter a number greater than 2"
      * leer n
      * if (n > 2)
        + for (int i = 1; i <= n; i++)

fifthop \*= i

* + - * + print "Factorial of" << n << " = " << fifthop
      * else
        + print "Error!! Number is smaller or equal to 2"
      * break
    - case 6:
      * clear screen
      * print "Are you sure (Y/N)";
      * leer exitop;
      * if (exitop == "y" || exitop == "yes" || exitop == "Yes" || exitop == "Y" || exitop == "yEs" || exitop == "YEs" || exitop == "YES" || exitop == "YeS" || exitop == "yeS")
        + Stop
      * else if (exitop == "N" || exitop == "n" || exitop == "No" || exitop == "NO" || exitop == "no" || exitop == "nO")
        + break
      * else
        + print "Error! isnt a (Y/N) anwer."
        + break
    - default:
      * print "\nINVALID INPUT\n\n"
    - Stop