

DESCRIPTION

- The user can enter a complex number into the calculator, where the number with i is the imaginary number. If a single number is entered, the calculator interprets it as real and attaches a 0 to the imaginary number. The complex number entered is stored on the stack and displayed in the stack column.
- The user decides the operation to use with the complex numbers stored in the stack and that are being displayed on the screen. The result of applying these operations is saved on the stack. The operations that the user can use are basic operations, stack operations, variable operations and complex operations.
 - The basic operations take the complex numbers stored on the stack and operate on them, and the possible operations are: addition, subtraction, multiplication, división, square root and invert sign.
 - The stack operations modify the stack, and the possible operations are: clear removes all the elements from the stack, leaving it empty; drop removes the last element from the stack; dup copy the last element of the stack and leaves it on top of the stack; swap exchange the position of the two last elements of the stack; over copy the second last element of the stack and puts it in the last position.
 - The operations with variables use some variables stored in the calculator, from "a" to "z" and are modified depending on the operation that is chosen. The possible operations are: >x which takes the element from the top of the stack and save it at the variable "x" in this case; <x saves onto stack the value of the element "x"; +x add the last element of the stack with the value of the variable and save the result of the add at the variable "x"; -x subtract the top of the stack at the value of the variable "x".
 - The complex operations consist of operations that are done to complex numbers and that can give complex numbers as solutions, saving these solutions on the stack: mod (modulus); arg (argument); pow (power); exp (exponential); log (logarithm); sin (sine); cos (cosine); tan (tangent); asin (arc sine); acos (arc cosine); atan (arc tangent).

SCREENSHOTS



