

Calculadora

UNIDAD 2

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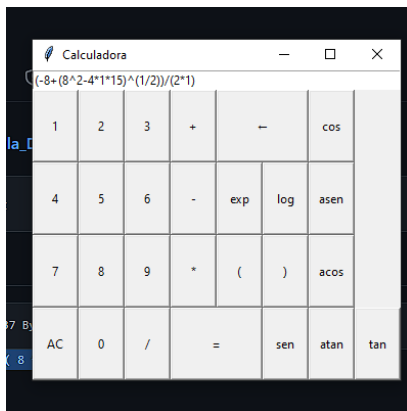
Fecha y lugar: Aguascalientes, ags, 10 de marzo 2023

$$1- (-8 + (8^2 - 4 * 1 * 15)^{0.5}) / (2 * 1)$$

Demostración:

```
C:\Users\magmr\Downloads\worlds>python Pruebas.py
['(', ' ', '8', '+', ' ', '(', ' ', '8', '^', '2', '-', '4', '*', '1', '*', '15', ')', '^', '0.5', ')', ' ', '/', ' ', '(', ' ', '2', '*', '1', ')']
Traceback (most recent call last):
  File "C:\Users\magmr\Downloads\worlds\Pruebas.py", line 118, in <module>
    b = infix_to_postfix(a)
  File "C:\Users\magmr\Downloads\worlds\Pruebas.py", line 24, in infix_to_postfix
    elif p[i] in operadores or p[i] in funciones:
NameError: name 'operadores' is not defined

C:\Users\magmr\Downloads\worlds>
```



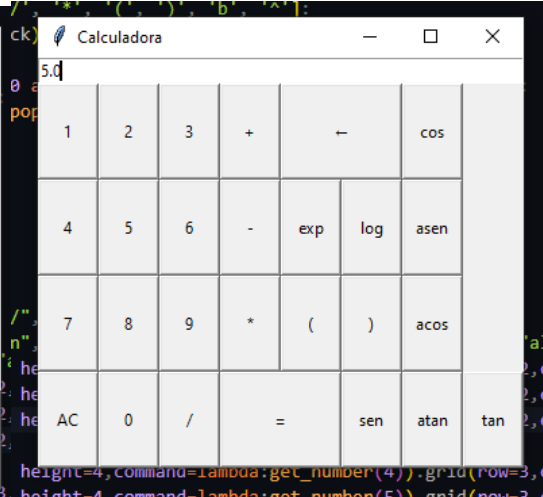
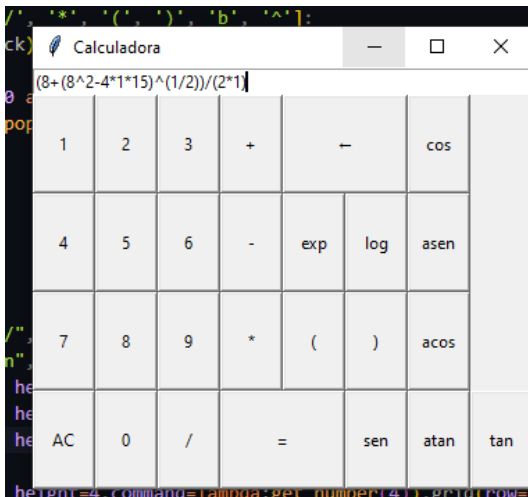
```
PROBLEMS 4 OUTPUT DEBUG CONSOLE TERMINAL JUPYTER
PS C:\Users\magmr\Downloads> & C:/Users/magmr/AppData/Local/Microsoft/WindowsApps/python3.10.exe "c:/Users/magmr/Downloads/worlds/Bedrock level/Calculadora.py"
Exception in Tkinter callback
Traceback (most recent call last):
  File "C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.2880.0_x64__qbz5n2kfrn8p0\lib\tkinter\_init_.py", line 1921, in __call__
    return self.func(*args)
  File "c:\Users\magmr\Downloads\worlds\Bedrock level\Calculadora.py", line 184, in <lambda>
    Button(root, text="=",width=5,height=4,command=lambda:resultado()).grid(row=5,column=3,sticky=W+E,columnspan=2)
  File "c:\Users\magmr\Downloads\worlds\Bedrock level\Calculadora.py", line 38, in resultado
    c=evaluate_postfix(b)
  File "c:\Users\magmr\Downloads\worlds\Bedrock level\Calculadora.py", line 93, in evaluate_postfix
    A = float(stack.pop())
IndexError: pop from empty list
[]
```

La primera expresión no la toma en cuenta ya que el código no soporta números negativos, además de que hace falta un botón para un número con decimal

$$2- '(8 + (8 ^ 2 - 4 * 1 * 15) ^ (1 / 2)) / (2 * 1)'$$

Demostración:

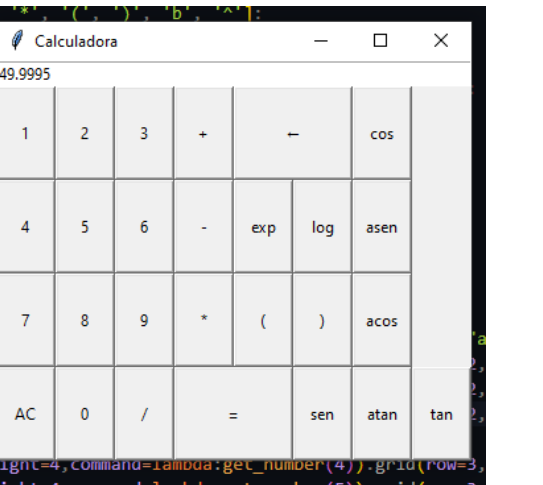
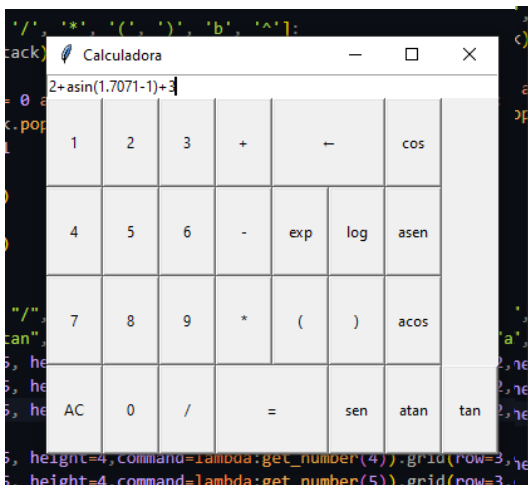
```
C:\Users\magmr\Downloads\worlds>python Pruebas.py
['(', '8', '+', '(', '8', '^', '2', '-', '4', '*', '1', '*', '15', ')', '^', '(', '1', '/', '2', ')', ')', '/', '(', '2', '*', '1', ')']
['8', '8', '2', '^', '4', '1', '*', '15', '*', '-', '1', '2', '/', '^', '+', '2', '1', '*', '/']
5.0
```



3- '2 + asin (1.7071 - 1) + 3'

Demostración:

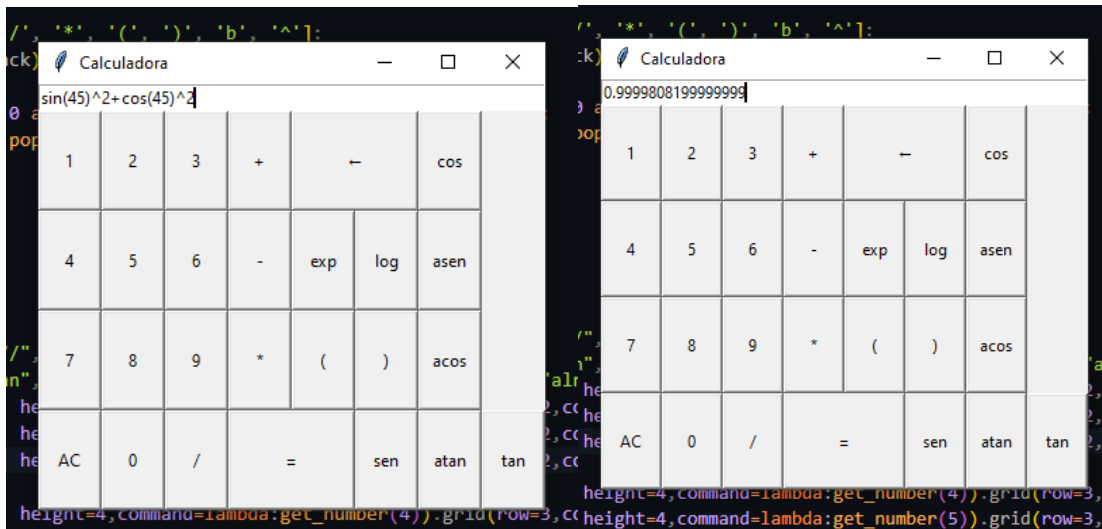
```
C:\Users\magmr\Downloads\worlds>python Pruebas.py
['2', '+', 'asin', '(', '1.7071', '-', '1', ')', '+', '3']
['2', '1.7071', '1', '-', 'asin', '3', '+', '+']
49.9995
C:\Users\magmr\Downloads\worlds>
```



4- 'sin (45) ^ 2 + cos (45) ^ 2'

Demostración:

```
C:\Users\magmr\Downloads\worlds>python Pruebas.py
['sin', '(', '45', ')', '^', '2', '+', 'cos', '(', '45', ')', '^', '2']
['45', 'sin', '2', '^', '45', 'cos', '2', '^', '+']
0.9999888199999999
C:\Users\magmr\Downloads\worlds>
```



5- $1 / (100 + 1 / (100 + 1 / (100 + 1 / 100)))$

Demostración:

```
C:\Users\magmr\Downloads\worlds>python Pruebas.py
['1', '/', '(', '100', '+', '1', '/', '(', '100', '+', '1', '/', '100', ')', ')', ')']
['1', '100', '1', '100', '1', '100', '1', '100', '/', '+', '/', '+', '/', '+', '/']
0.0099999000199950014
```



6- $2 * \log (94 + 2 * 3) ^ 3$

Demostración:

```
C:\Users\magmr\Downloads\worlds>python Pruebas.py
['2', '*', 'log', '(', '94', '+', '2', '*', '3', ')', '^', '3']
['2', '94', '2', '3', '*', '+', 'log', '3', '^', '*']
16.0
```

Calculadora

2*log(94+2*3)^3

| | | | | | | |
|----|---|---|---|-----|------|------|
| 1 | 2 | 3 | + | ← | cos | |
| 4 | 5 | 6 | - | exp | log | asen |
| 7 | 8 | 9 | * | (|) | acos |
| AC | 0 | / | = | sen | atan | tan |

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16.0

| | | | | | | |
|----|---|---|---|-----|------|------|
| 1 | 2 | 3 | + | ← | cos | |
| 4 | 5 | 6 | - | exp | log | asen |
| 7 | 8 | 9 | * | (|) | acos |
| AC | 0 | / | = | sen | atan | tan |