author = '8175858, Braun'

Analysis:

The program is developed according to the EVA design pattern. Input and output are done in the console. To call a function, write the function name.

Task a and b only allow Integers, while task c allows both Integers and Floating Point Numbers.

Output is done in the console or the Turtle window.

Testing the program:

Enter function name: decimal_to_octal

Enter number to convert: 10

12

Enter function name: decimal_to_basis

Enter number to convert: 10

Enter basis: 2

1010

Enter function name: chaos_turtle

Enter iteration count: 1000

Enter x-position: 0

Enter y-postion: 0

Enter function name: none

Invalid function name

Description of the program:

The program requires the epr_functions.py module. The program is written and tested in Python 3.12.0. A Python interpreter must be installed. The program can be started with the command "python3 ue03.py" in the terminal. No bugs are known.

First the programm asks the user to give a function name. Based on that name i call the appropriate function and print the return value to the console or Turtle creates a window. The code is wrapped inside of a try except block to catch invalid function names and invalid input.