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import random
from math import floor, ceil

def ex_1():
    lst = []
    for i in range(100):
        lst.append([])
        for j in range(100):
            lst[i].append([])
            for k in range(100):
                lst[i][j].append(random.random())
    return lst

def ex_2(values):
    set1 = set()
    set2 = set()
    for val in values:
        if val % 2 == 0:
            set1.add(val)
        else:
            set2.add(val)

    def check_set(s):
        return {
            'count': len(s),
            'max': max(s) if s else None,
            'min': min(s) if s else None
        }

    result = {
        'even_set': check_set(set1),
        'odd_set': check_set(set2)
    }

    return result

def func1():
    count_of_numbers, average, tav = 0,0,0
    tav = input("enter a number, to exit enter 'q'\n")
    while tav != 'q':
        average = (average * count_of_numbers + int(tav))/(count_of_numbers + 1)
        count_of_numbers = count_of_numbers + 1
        tav = input("enter a number, to exit enter 'q'\n")
    print("The average is: ")
    print(average)

def func2(list, num):

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    list[:] = [item for item in list if item % num]

def func3():
    str = input("enter a string\n")
    if str[:ceil(len(str)/2)] == str[floor(len(str)/2): ][::-1]:
        print("This is palindrome")
    else:
        print("This is not palindrome")

def func4():
    nums = []
    while len(nums) < 3:
        num = int(input("enter a number between 0 and 9: "))
        if 0 <= num <= 9 and num not in nums:
            nums.append(num)
        else:
            print("Please enter a unique number between 0 and 9.")

    drawn_numbers = random.sample(range(10), 3)

    if sorted(nums) == sorted(drawn_numbers):
        print("You Win!!")
    else:
        print("You Lose...")
    print(f"Drawn numbers: {drawn_numbers}")

def func5(name_of_file):
    with open(name_of_file, 'r') as file:
        lines = file.readlines()

    total_sum = sum([int(line) for line in lines])

    with open(name_of_file, 'a') as file:
        file.write(str(total_sum) + '\n')

def func6(lst):
    dict = {}
    for i in range(lst):
        if not dict[str(lst[i])]:
            dict[str(lst[i])] = str(lst.count(lst[i]))

def func7(lst):
    for item in lst:
        if item < 0 :
            print(ValueError("number must be positive"))
        if not isinstance(item, int):

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print(ValueError("number must be integer"))
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