

Pair Programming Lab 5

In the following exercise, you will be using Python to solve logical problems in pairs.

- Use the function `input()` to take input from the user
- Use the function `print()` to display output to the user
- For each problem, you should create a file `python##.py` (`##` represents the number of the exercise → for example, 1 or 2a...)
- At the end, compress all the files in 1 folder named “Name1Name2Lab5”

Problem 1:

Create a function that takes a string and checks if it's a palindrome. The function returns true or false. If it returns true, you should print “palindrome”, if it returns false, you should print “not palindrome”

Sample Input

test

abcdcba

Sample Output

not palindrome

palindrome

Problem 2:

Create a function that generates random number between 1 and 30.

Create another function that takes 2 numbers and checks if they are equal

Create one last function that asks the user to enter a guess and checks if it's true (allow up to 5 tries)

Sample Input

Enter your guess: 10

Enter your guess: 20

Enter your guess: 25

Sample Output

Wrong!

Wrong!

Right!

Problem 3:

Write a function that takes a list and returns the largest element in the list.

Sample Input

5 1 2 3 4 5

7 2 4 9 1 2 1 8

Sample Output

5

9

Problem 4:

Write a function that takes a list and returns the list reversed.

Sample Input

1 2 3 4 5

Sample Output

5 4 3 2 1

Problem 5:

Write a function that takes a list and a number and returns true if the number is present and false if not

Sample Input

1 2 3 4 5

Sample Output

5

true

Problem 6:

Write a function that takes a list and returns the sum of the numbers in the list

Sample Input

1 2 3 4 5

Sample Output

15