

Python

Homework 01

Tasks

1. Write a script that asks the user for two numbers and prints the results of all 5 arithmetical operations (+, -, *, /, %).
2. Write a script that calculates the area of a square. Ask the user for two numbers (height and width) and calculate the area of the square.
3. Write a script that calculates the area of a triangle. Ask the user for two numbers (height and width) and calculate the area of the triangle.
4. Write a script that asks the user for dimensions of two squares and checks which of the squares is bigger.
5. Write a script that asks the user for 5 numbers and calculates the average of the 5 numbers.
6. Write a registration script according to the following rules. (The script from the lesson)
 - a. Ask the user for his first name. Make sure that the name contains ONLY letters, and that the length of the name is at least two characters.
 - b. Ask the user for his last name. Make sure that the name contains ONLY letters, and that the length of the name is at least two characters.
 - c. Ask the user for his email. Make sure that the email address contains a '@' and a '.' (comma).
 - d. Ask the user for a phone number. Make sure that it is a valid Israeli mobile phone number. (Starts with '05', contains 10 digits, contains ONLY digits)
 - e. Ask the user for a password twice. Make sure that the password is at least 6 characters long. Also make sure that both the passwords that the user typed are the same.
 - f. All the previous fields are mandatory, thus if the user does not type some information the script should print an error message and exit.
 - g. At the end of the script print all the information that the user provided. Instead of printing the password print a sequence of * symbols that has the same length as the password typed by the user.
7. Write a script that asks for a phone number (NOT MOBILE) and tells which region that number belongs to.
For example, if the phone number is 08-XXXXXXX the script will tell that the number belong to the **Southern District**.
 - a. Make sure that the script can handle phone numbers with and without a '-' (dash).
8. Write a script that asks the user to enter three words and tells which of the words is the longest.