Python programming exercises

Part 2

1. If statement

1.1. Word's length

- Create a program that asks user to enter a word
- If word has more than 10 characters - print "This ia a long word". If word has 10 characters or less - do not print anything
- Modify program to print "This is a short word" if word has 10 or less characters
- Modify program to print:
  - "This is a long word" if word has more than 10 characters
  - "This is a medium word" if word has between 5 and 10 characters
  - "This is a short word" if word has less than 5 characters

2. For loop

2.1. Sum

- Open `double.py` file. Inside, you'll find a definition of a list containing numbers.
- Calculate and print sum of all numbers from the list

2.2. Average

- Based on the program above, calculate an average of the numbers from the list (hint: you will need to calculate the length of the list `numbers` - you can do it using `len(numbers)`)

2.3. Double

- Using the list `numbers`, create a new list, where each element is doubled (multiplied by 2). Example: `[2, 3, 4]` becomes `[4, 6, 8]`

3. While loop

3.1. Input words

- Open `input_words.py` file
- Write a program that expects user to write exactly 3 words. If user writes less or more than three words - program shall ask user again to write words.

4. String

4.1. Find words

- Open `find_words.py` file. Inside, you'll find a list with various words
- Print all words from the list that contain letter '`p`'

- Print all words from the list that contain letter '`p`' or '`P`'
- Print all words from the list that start with letters '`kt`'

4.2. Find the longest word

- Open `longest_word.py` file. Inside, you'll find a list with various words
- Find and print the longest word from the list

4.3. Reverse words

- Open `reverse_words.py` file. Inside, you'll find a list with various words
- Reverse each word from the list and save these reversed words in a new list. Example: `['hello', 'world']` becomes `['olleh', 'dlrow']`. Hint: search slides for `l[::-1]` expression