LAB-1

1. Find The greatest common divisor of multiple numbers read from the console.
2. Write a script that calculates how many vowels are in a string.
3. Write a script that receives two strings and prints the number of occurrences of the first string in the second.
4. Write a script that converts a string of characters written in UpperCamelCase into lowercase_with_underscores.
5. Given a square matrix of characters write a script that prints the string obtained by going through the matrix in spiral order (as in the example):
   ```
   firs 1 2 3 4 => first_python_lab
   n_lt 12 13 14 5
   oba_ 11 16 15 6
   htyp 10 9 8 7
   ```
6. Write a function that validates if a number is a palindrome.
7. Write a function that extract a number from a text (for example if the text is "An apple is 123 USD", this function will return 123, or if the text is "abc123abc" the function will extract 123). The function will extract only the first number that is found.
8. Write a function that counts how many bits with value 1 a number has. For example for number 24, the binary format is 00011000, meaning 2 bits with value "1"
9. Write a functions that determine the most common letter in a string. For example if the string is "an apple is not a tomato", then the most common character is "a" (4 times). Only letters (A-Z or a-z) are to be considered. Casing should not be considered "A" and "a" represent the same character.
10. Write a function that counts how many words exists in a text. A text is considered to be form out of words that are separated by only ONE space. For example: "I have Python exam" has 4 words.