## **Assignment number 2 (intro to programming):**

- 1. Write a program that ask user to enter input (text or number or number with text):
  - In case the input is number get the summation of its digits.
  - In case the input is text remove the spaces.
  - In case number with text split them, number and text each individually.
- Write a function which accept a string as argument and display total number of words.
- 3. Write function pow() that calculates the power, which takes base and exponent as arguments.
- 4. Write function area() that calculates the area of the shape.
- 5. Write a program to find the sum of all numbers in a list.
- 6. Write a program to concatenate two tuples then get the max and min element.
- 7. Write a function that takes tuple as argument and if length of tuple greater than 5, return the count of number elements. Note that the tuple may be with different data types.
- 8. Write a function which will able to print a index of list element without using index function.
- 9. Write a Python function to check whether a number falls within a given range.
- 10. Write a Python function that takes a number as a parameter and checks whether the number is prime or not.
- 11. Write a Python program to calculate the average value of the numbers in a given tuple of tuples.

Original Tuple:

((10, 10, 10, 12), (30, 45, 56, 45), (81, 80, 39, 32), (1, 2, 3, 4)) Average value of the numbers of the said tuple of tuples: [30.5, 34.25, 27.0, 23.25]

- 12. Write a Python program to check if a list is empty or not. if not, sort it in increasing order.
- 13. Write a Python function that takes two lists and returns True if they have at least one common member.
- 14. Write a Python program to print the numbers of a specified list after removing even numbers from it.