

Task1:

You need to write a function in python that return all such numbers which are divisible by 7 but are not a multiple of 5, between 2000 and 3200 (both included). Return the obtained numbers in a comma-separated sequence on a single line.

Task2:

You need code a function that calculates and returns the value according to the given formula:

$P = \text{Square root of } [(2 * A * B)/C]$

Following are the fixed values of A and B:

A is 50. B is 30.

The values of the literal C should be taken as console input to your program in a comma-separated sequence.

Example

Let us assume the following comma separated input sequence is given to the program:

100,150,180

The output of the program should be:

18,22,24

Task3:

You need to write a function that takes a comma separated sequence of words as input and prints the words in a comma-separated sequence after sorting them alphabetically.

Suppose the following input is supplied to the program:

without,hello,bag,world

Then, the output should be:

bag,hello,without,world

Task4:

You need to write a program that takes sequence of lines as input and prints the lines after making all characters in the sentence capitalized.

Suppose the following input is supplied to the program:

Hello world

Practice makes perfect

Then, the output should be:

HELLO WORLD
PRACTICE MAKES PERFECT

Task5:

You need to write a function that counts the number of vowels in a given sentence as input from console.

Suppose the following input is supplied to the program:

Hello world

Practice makes perfect

Then, the output should be:

a appeared 2 times

e appeared 5 times

i appeared 1 time

o appeared 2 times

u appeared 0 time

PRACTICE MAKES PERFECT

Task6:

You need write a function that traces and makes a list of all such numbers from 1000 to 3000 in which all the digits are even numbers.

Task7:

You need to write a code which accepts a sequence of comma separated **4 digit binary numbers** as its input and then check whether they are divisible by 5 or not. The numbers that are divisible by 5 are to be printed in a comma separated sequence.

Example:

0100,0011,1010,1001

Then the output should be:

1010

Reference: <https://www.datacamp.com/.../python-data-type-conversion>

Task8:

Write a program that accepts a sentence and calculate the number of letters and digits.

Suppose the following input is supplied to the program:

hello world! 123

Then, the output should be:

LETTERS 10

DIGITS 3