Lab: Comprehensions

Problems for in-class lab for the Python Advanced Course @SoftUni. Submit your solutions in the SoftUni judge system at https://judge.softuni.bg/Contests/1836

1. ASCII Values

Write program that receives a **list of characters** and creates a dictionary with each **character** as a **key** and its **ASCII** value as a **value**. Try solving that problem using **comprehensions**.

Examples

Input	Output
a, b, c, a	{'a': 97, 'b': 98, 'c': 99}
d, c, m, h	{'d': 100, 'c': 99, 'm': 109, 'h': 104}

2. No Vowels

Using a comprehension write a program that receives a **text** and **removes** all the **vowels** from it. Print the new text **string after removing the vowels**. The vowels that should be considered are **'a', 'o', 'u', 'e', 'i'**.

Examples

Input	Output
Python	Pythn
ILovePython	LvPythn

3. Even Matrix

Write a program that receives a **matrix of numbers** and prints a **new one** only with the numbers that are **even**. Use nested comprehension for that problem.

Examples

Input	Output
2 1, 2, 3 4, 5, 6	[[2], [4, 6]]
4 10, 33, 24, 5, 1 67, 34, 11, 110, 3 4, 12, 33, 63, 21 557, 45, 23, 55, 67	[[10, 24], [34, 110], [4, 12], []]

4. Flattening Matrix

Write a program that receives a **matrix** and prints the **flattened** version of it (a list with all the values). For example, the flattened list of the matrix: **[[1, 2], [3, 4]]** will be **[1, 2, 3, 4]**.

Follow us:

Examples

Input	Output
2 1, 2, 3 4, 5, 6	[1, 2, 3, 4, 5, 6]
3 10, 2, 21, 4 5, 20, 41, 9 6, 2, 4, 99	[10, 2, 21, 4, 5, 20, 41, 9, 6, 2, 4, 99]

5. Filter Numbers

You will be given a **start** and an **end**. Print all the numbers in the given **range (inclusive)** that are **divisible** by **any** of the numbers from **2 to 10**. Use comprehensions for this problem.

Examples

Input	Output
1 20	[2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 14, 15, 16, 18, 20]
45 50	[45, 46, 48, 49, 50]