**Name:**

**Programming I**

**Lab Exercise 1.16.2025**

1. Create a function that accepts a list of two strings and checks if the letters in the second string are present in the first string.

Examples

letter\_check("trances", "nectar") ➞ True

letter\_check("compadres", "DRAPES") ➞ True

letter\_check("parses", "parsecs") ➞ False

Notes

Function should not be case sensitive (as indicated in the second example).

Both strings are presented as a single argument in the form of a list.

2. Create a function that takes a string as an argument and returns a coded (h4ck3r 5p34k) version of the string.

Examples

hacker\_speak("javascript is cool") ➞ "j4v45cr1pt 15 c00l"

hacker\_speak("programming is fun") ➞ "pr0gr4mm1ng 15 fun"

hacker\_speak("become a coder") ➞ "b3c0m3 4 c0d3r"

Notes

In order to work properly, the function should replace all 'a's with 4, 'e's with 3, 'i's with 1, 'o's with 0, and 's's with 5.

3. Throughout the 12 days of Christmas, my true love gave me in total 364 items.

Create a function where given n days as an argument, return the total amount of items received throughout those days as an integer.

Examples

xmasItems(12) ➞ 364

xmasItems(3) ➞ 10

xmasItems(31) ➞ 5456

Notes

You will only be given valid inputs.

Remember to return as an integer.

0 as input should return 0.

4. Create a function that takes a list of 10 numbers (between 0 and 9) and returns a string of those numbers formatted as a phone number (e.g. (555) 555-5555).

Examples

format\_phone\_number([1, 2, 3, 4, 5, 6, 7, 8, 9, 0]) ➞ "(123) 456-7890"

format\_phone\_number([5, 1, 9, 5, 5, 5, 4, 4, 6, 8]) ➞ "(519) 555-4468"

format\_phone\_number([3, 4, 5, 5, 0, 1, 2, 5, 2, 7]) ➞ "(345) 501-2527"

Notes

Don't forget the space after the closing parenthesis.