

# Python

# Elements of the language

- Functions
- While and for loops
- Lists

# Exercise

```
def my_range(start: int, end: int, step: int) -> list
```

# Exercise

Insert an element into an array

# Exercise

Given two strings, write a method to decide if one is a permutation of the other.

# Exercise

Implement a method to perform basic string compression using the counts of repeated characters. For example, the string aabcccccaaa would become a2b1c5a3. If the

"compressed" string would not become smaller than the original string, your method should return

the original string. You can assume the string has only uppercase and lowercase letters (a - z).

# Exercise

Quadratic Equation

# Exercises

- Extract a sub region of a 2D array
- Insert into a region of a 2D array