

## Basic python. String and list operations

- 1) Write a program which accepts a name from a user and prints the same name with all letters capitalized.
- 2) Write a program that recognizes palindromes (i.e. words that look the same written backwards). For example, `is_palindrome("radar")` should return `True`.
- 3) `append`, `sort`, etc. are list methods that operate on a list. List methods are void, they operate on the list and returns none. Try to understand this by using the `sort` method.
- 4) Write a program to check if a list is sorted or not. It should return a `'True'` or `'False'`
- 5) Create a program which defines a list `[1,2,3,4,5]`. Next, let it accept a number from the user (*you can try using the "raw\_input" function*) and check if it is inside the list. Depending on the result, the output should be *"Yes, found it!"* or *"Sorry, could not find that."* You may want to use the `"in"` keyword for this exercise. Try typing `"a"` in `"Jack"` and see the output. This should help you understand what the `"in"` keyword does.
- 6) Read a sentence from user and split them to words and print one word in a line.
- 7) On your own, and by searching, find as many ways to get cumulative sum of a list. ie., an element `c_i` in the new list should be  $c_i = \sum_{j=0, i} l_j$

Example. `l=[1,2,3]` should give `c=[1,3,6]`