

Lab Sheet – 5

The purpose of this lab is to get you familiar with strings and start working with them. You will first learn how to define string variables, how to receive strings from the user, how to print, how to access individual chars of the strings, iterating through the strings, slicing and joining strings. Next, you will solve 20 simple exercises on strings that will provide insights on working with strings. Finally, you will be exposed to the string functions/methods which can be used to manipulate strings by invoking appropriate functions.

- Understand your role and Python's role in problem solving. Python will not think and give you a solution. You must do that. Coding comes after that.
- The crucial thing is **trying on your own**. Ask for help only after trying enough.
- You don't have to memorize any of the syntax. You can always refer when needed.
- Whatever Python you are taught is more than sufficient to solve the problems given. Develop the code from first principles from your raw understanding.

1. Strings in Python (not more than 30 mins)

- a. [A gentle introduction to strings \(Colab tutorial\)](#)
- b. Look at each code snippet, run it and understand how strings work.
- c. You don't have to memorize. You can refer to this page when you code.

2. String Exercises

- a. [A set of 20 practice exercises on strings \(Colab page\)](#)
- b. Exercises are organized in the increasing order of difficulty.
- c. In case you find an exercise hard, skip and move on to the next.
- d. Try to complete **at least 15** exercises.
- e. You don't have to do all in one stretch. Solving 4-5 per day is fine too.
- f. **Try on your own**. Don't ask for help without trying.

3. String Methods (not more than 30 mins)

- a. https://www.w3schools.com/python/python_ref_string.asp
- b. Scan through the methods given in this page.
- c. You can click on few methods and try the example given.
- d. Commonly used methods include count, find, index, startswith, endswith, split, strip, upper, lower, rfind, rindex, rsplit and is*.
- e. Again, you don't have to memorize these method names, how to use, etc.
- f. Just know that such methods are there and you can refer when necessary.

4. Apply String methods to exercises (about 15 mins)

- a. [A set of 20 practice exercises on strings \(Colab page\)](#)
- b. Solve problem 2 or 3 using appropriate string method(s).
- c. Solve problem 7, 8 or 9 using appropriate string method(s).

Important note: You must try on your own and drill your way through. Don't mind if you struggle. Without struggle, there is no learning. Get used to the struggling and overcoming. That is very normal in problem solving. You can seek help after you have tried enough.

Submission: You can print the **Colab page of String Exercises** as PDF and submit in [Teams](#) → [Week 5 - Assignment](#).