

# Python lab 2 – Regex in Python

**Python lab 2, 3 and this week's group practice will help you get ready for future HW.** Without the lab practice, HW would be very confusing. Please work diligently during lab time, discuss with your coding partners and complete the tasks.

## Grading (10 points)

Submit your program individually.

## Submission:

Python code

Screenshot of your outputs

Submit them to CC

**Students who are done with the lab early: please help others if you can. Reading others' code and explaining technical concepts to them will reinforce your understanding. You will understand and remember a topic for a long time if you teach someone how to do it.**

## Task 1: Pattern matching for strings

Please find your answers to **a** through **f** from Week 2's "Group practice – regular expression". You will code these regular expressions in Python. (Organize your code anyway you want by creating functions, etc.)

1. Define 10 string variables such as follows. Notice some of them fit into multiple patterns while some others don't fit in any patterns.  
"22.11", "23", "66.7F", "123abcde", "Case44", "Happy", "78", "66.7", "yes123", "Book111"
2. Write down the regular expressions for these patterns (you already have them from last week's practice). We went over 3 re functions in last lecture (Check "RegexInPython Example" under week 3).
3. For each test string, your code needs to find all matching patterns.
4. Print out the results nicely formatted.  
e.g.  
"22.11 matches the pattern: A float consists of 1 or more digits before and after decimal point."  
"22.11 matches the pattern: A float with exactly 2 digits after the decimal point"  
"23 matches the pattern: An integer"  
"yes123" doesn't match any patterns."

## Task 2: Remove a part of a string

You can use the same .py file from task 1 to complete this question. Write a function that will find the int number at the beginning of a long string and remove it from the long string. Note that the integer might

have space or no space following it. (Technical googling practice – which function can you use to remove part of a string from a long string?)

Sample outputs:

Original sentence: 22 street

Found integer 22 at the beginning of this string, starting at index \_ ending at index \_. The rest of the string is: street.

Original sentence: "90years"

Found integer 90 at the beginning of this string, starting at index \_ ending at index \_. The rest of the string is: years.