**ASSIGMENT**

**PYTHON CLASS 1**

1. **What is the CPython and JPython?**

Ans: CPython is the original Python implementation. It is the implementation you download from Python.org. CPython happens to be implemented in C. CPython compiles your Python code into bytecode (transparently) and interprets that bytecode in a evaluation loop. Python-the-language development uses CPython as the base. Jpython is implemented on java platform. It compiles your Python code to Java bytecode, so your Python code can run on the JVM. With JPython, Python code may be run as client-side applets in web browsers, as server-side scripts, and in a variety of other roles.

1. **Basic difference between python2 and python3.**

Ans: In python 2, implicit str type is ASCII but in python 3 implicit str type is Unicode. Another basic difference is python 2 uses print statement for printing but python 3 uses print function. This version was mainly released to fix problems which exist in Python 2.

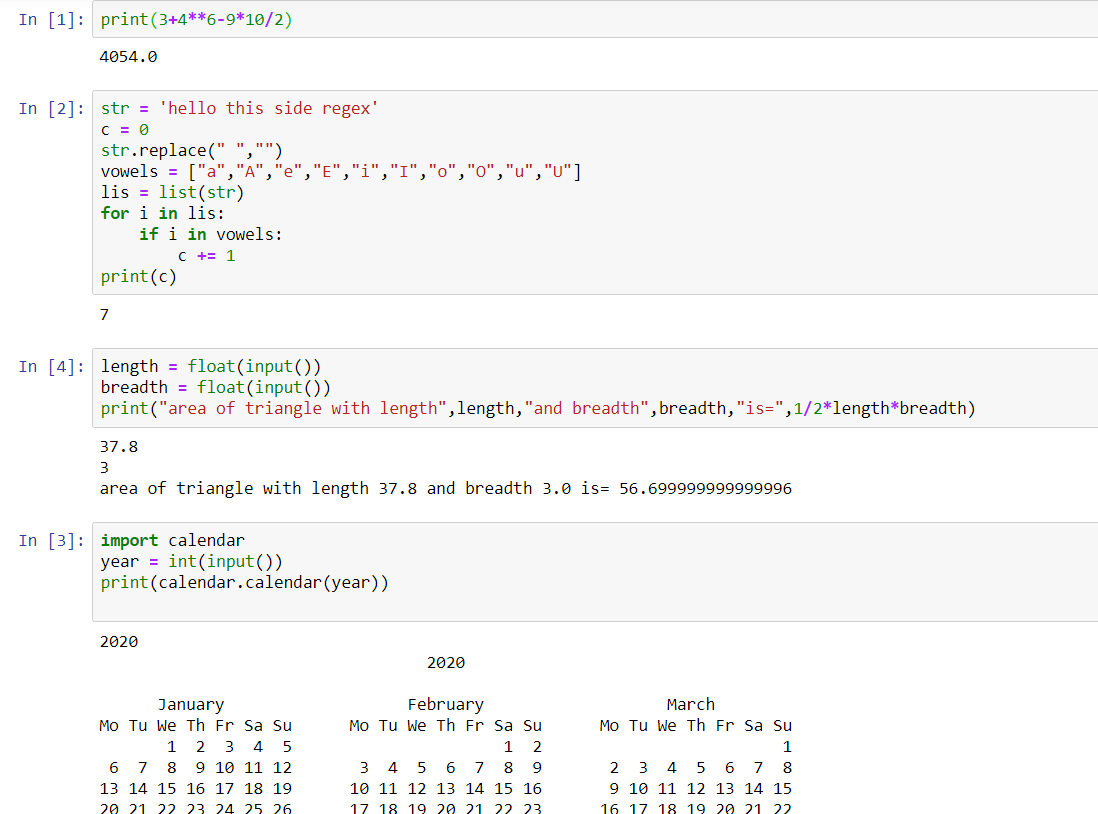
1. **Difference between ASCII and Unicode.**

Ans: ASCII and Unicode are two character encodings. The main differencebetween ASCII andUnicode is that the **ASCII** represents lowercase letters (a-z), uppercase letters (A-Z), digits (0-9) and symbols such as punctuation marks while the **Unicode** represents letters of English, Arabic, Greek etc., mathematical symbols, historical scripts, and emoji covering a wide range of characters than ASCII.

ASCII was meant for English only. Also ASCII defines 128 characters, which map to the numbers 0–127. Unicode defines (less than) 221 characters, which, similarly, map to numbers 0–221.

**PYTHON CLASS 2**

1. **What is the output of the input: (3+4\*\*6-9\*10/2).**
2. **Let a string = “hello this side regex”; find out the no. of vowels present in this string.**
3. **Find out the area of triangle by taking the input from the user.**
4. **Print the calendar on the terminal. Allow user to input the year.**

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**PYTHON CLASS 3**

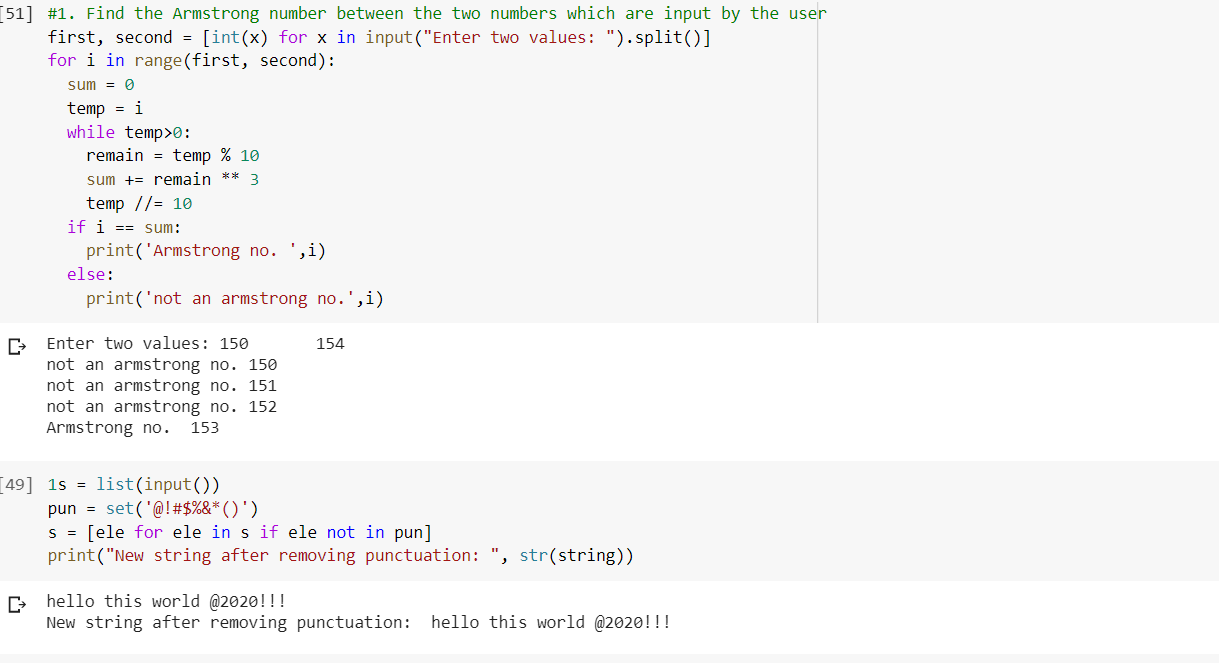
1. **Find the Armstrong number between the two numbers which are input by the user.**

**Armstrong number: 153 -> 1\*1\*1 + 5\*5\*5 + 3\*3\*3**

1. **Let’s say you have a string: “hello this world @2020!!! ”.**

**Remove the punctuation like [“@!#$%&\*()”] from the string.**

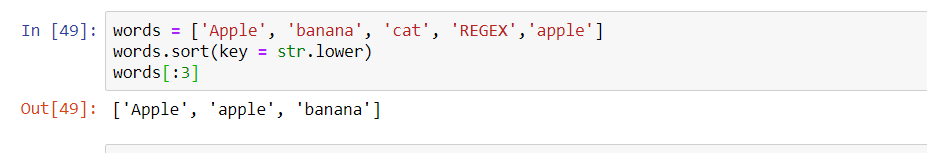
**Final output should be without the punctuation; “hello this world 2020”**



1. **You have list with words - [“Apple”, “banana”, “cat”, “REGEX”,”apple”]**

**Sort words in Alphabetical order.**

**If you get output, like [Apple, apple, banana], How has it happened?**



We can use the optional parameter ‘key’ to perform sorting according to our own wish. We can also pass a function inside the key value.