

Python-IF-Number-List

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Note to TopClown next time you edit: add hyperlinks to the python structures.

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Overview, Introduction and Objective:

This is a Python Lab (but could be C++ too) where you will write a program that implements a number of if elif and else statements. The objective is to use your prior knowledge of Python coding to implement this program.

Prior Knowledge:

- Doing Math, and checking the results with conditional `if/else`
- Understand conditional loops, including `for` and `while` loops
- Understand how to nested if statements

What You Will Know & Be Able To Do:

- Have a greater level of understanding on how and when to use conditional statements including `if/else`, `for` and `while` loops
- Understand how to nested for statements
- Be able to describe what an if statement does and how it works

Resources & Materials Needed:

- PC, Laptop or Raspberry Pi
- Link to GutHub for Source
 - Python Template to start from
- Link to online C++ or Python Compiler
 - [Python 3 On-Line Python Interpreter](#) - Tutorials Point
 - [Python 3 Interpreter](#) - Online GDB

How You Will Be Measured:

- Programming Lab Rubric link (coming Soon)
- You will turn your code as a `Lastname-Firstname-IF-4.py` in to the [Google classroom](#)... Check the Stream or the Programing category for C++ or Python

Scenario & Lab Instructions:

Download the file from my github - [pyLab-if-4.py](#)

Write a program that prints only the number from the list based on the following rules:

- 1) Print all the number in the list that are even. Print "The <num> is Even"
- 2) If the number is divisible by 3 print "This Number, <num> is Divisible by 3"
- 3) If the number is larger than 500, print "The <num> is bigger than 500"
- 4) If the number is less than 500, then check if the number is odd, and if it is, print "This number, <num> is less than 500 and odd"
- 5) If the number is 533, 412, 69, or 399 print "WooHoo"
- 6) Make up your own statement that uses an IF, ELIF and ELSE

Extra Credit #1: Change the program to let you input a long list of numbers, and then run your code.

Copy, Edit & Execute Code

Instructions for accessing any example code on Github

- You can start by copying Python pyLab-if-4.py from Github to start from. Update the program with your comments and your code.
- Python Compiler
 - Use your Raspberry Pi
 - [Python 3 On-Line Python Interpreter](#) - Tutorials Point
 - [Python 3 Interpreter](#) - Online GDB

Expected Output:

<td>

Turn In Your Code:

Turn your code as a **Lastname-Firstname-IF-4.py** as specified in the **How You Will Be Measured** section above.




Appendix

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Where to get more information about this lab and the presentation that may go with it? Please visit STEAMClown.org or jim.The.STEAM.Clown's Google Site

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