

## Programming Project 4 – Phone Number

*Note: When you turn in an assignment to be graded in this class, you are making the claim that you neither gave nor received assistance on the work you turned in (except, of course, assistance from the instructor or teaching assistants).*

In this project, you will build a phone number from digits entered by your user. Your program will loop until 10 valid digits have been entered. It will then use those digits to display the phone number entered using the format: XXXXXXXXXX (or (XXX) XXX – XXXX for extra credit).

The program will ask for a digit, it will check to see if the digit is actually between 0 and 9 inclusively. If so, the digit will be stored as the next number in the phone number. Once all digits are entered, the program will display the phone number. Hint: Remember that `str(num)` will convert any num into a string.

Here is a typical program run. The sample user input is shown in blue italics.

Input:

Enter a digit: *1*  
Enter a digit: *4*  
Enter a digit: *11*  
Enter a digit: *2*  
Enter a digit: *0*  
Enter a digit: *21*  
Enter a digit: *7*  
Enter a digit: *9*  
Enter a digit: *1*  
Enter a digit: *0*  
Enter a digit: *5*  
Enter a digit: *4*

Output:

**1420791054                    (or (142) 079 - 1054 for extra credit)**

Before beginning this project, you will document your algorithm as a list of steps to take you from your inputs to your outputs. Each step will be added as a comment block within your code. You will have the comment block right above the code that performs the actions specified.

For example, before your lines of code that ask the user for inputs, you would have a comment block that states what inputs you are requesting from the user. Please see the example code provided as a sample of this.

This and all program files in this course must include a comment block at the beginning (top) of the source code file that contains:

- your name
- the Python program name
- project description
- the date

The comment lines should look like this:

```
#####  
# Your name  
# Python program name  
# Project description  
# The date  
#####
```

Your program must be in its own file and must compile and execute correctly using IDLE or the command line.

Name your source code file **PhoneNumber.py**. Test your application to be sure that it produces the correct output.

You will submit the following to the Assignment link in Blackboard:

- source code (PhoneNumber.py)

Ask questions about any part of the programming project that is not clear!

## Rubric

Topic	Points
Code runs and produces the correct output	30
Code contains a comment block at the top as specified	5
Code contains comment blocks throughout that document the algorithm	5
Loop and decisions are appropriately structured	10
Code is easy to read	5
Total	55