

Programming Activity

The international standard letter/number mapping found on the telephone is shown below:

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
*	0 —	#

Write a program that continues to prompt the user (until the user quits) to enter a letter and displays its corresponding number (if the input is not a letter, display an error message, check the sample output on next page).

- Use a **while loop** to continue to prompt the user to enter a letter until he/she quits.
- If the input is a letter, convert that letter into lowercase/uppercase, and then use **if statement** to determine its corresponding number, notice that three letters share the same number (e.g. A, B C correspond to number 2, etc).
- You will need to use some methods from Chapter 8 Strings to finish this program

You can name your program keypadYourLastName.py

If you have an infinite loop, click in the Command window, press **Ctrl + C** to stop the execution.

```
# prompt for input
```

```
# while loop to display letter/number mapping until the user quits
```

Sample Output

```
Do you want to enter a letter (enter yes or no)? yes
Enter a letter: h
The corresponding number is 4

Do you want to enter a letter (enter yes or no)? yes
Enter a letter: X
The corresponding number is 9

Do you want to enter a letter (enter yes or no)? yes
Enter a letter: +
+ is an invalid letter

Do you want to enter a letter (enter yes or no)? no
>>>
```

Include header comments (i.e., **at the beginning of your file**) formatted as shown below. Your electronic submission of the program file will represent your endorsement of the Honor Code Statement.

```
# Course: CSCI 256, Section 1
# Student Name: Jane Doe
# Student ID: 12345678
# Program 6
# Due Date:

# In keeping with the Honor Code of UM, I have neither given nor
# received assistance from anyone other than the TA or the instructor.

# Program Description:
```

Notice: You need to submit **your program** in Blackboard. Click on **Program 6** link in Bb, click **Browse My Computer**, attach the program, and click **Submit**.