

Phone Number Converter

Many companies use telephone numbers like 555-GET-FOOD so that the number is easier for their customers to remember. On a standard telephone, the alphabetic letters are mapped to numbers as shown in Table 1a.

| Digit | Letters | | |
|-------|----------------|--|--|
| 2 | A, B, and C | | |
| 3 | D, E, and F | | |
| 4 | G, H, and I | | |
| 5 | J, K, and L | | |
| 6 | M, N, and O | | |
| 7 | P, Q, R, and S | | |
| 8 | T, U, and V | | |
| 9 | W, X, Y, and Z | | |

(a)

| Input | Output |
|--------------|--------------|
| 555-GET-FOOD | 555-438-3663 |
| 555-New-Cars | 555-639-2277 |

(b)

Table 1: Keypad letter mapping (a) and test data (b) for Exercise 31.

Starting from the `phone_number_converter.py` template file, write a new function named `convert_number` that takes a phone number string such as 555-GET-FOOD as its only argument and returns the telephone number with any alphabetic characters that appeared in the original translated to their numeric equivalent. For example, if the argument is 555-GET-FOOD, the function should return 555-438-3663. Make sure the function can handle both upper and lower case input.

Then complete the main function of the program to collect a phone number string from the user and display the converted result. Test your program with the test data in Table 1b.

Finally format your program to match the sample run shown below. Your output should match the sample output, character for character, including all white space and punctuation. User input in the sample has been highlighted in **Pappy's Purple** to distinguish it from the program's output, but your user input does not need to be colored. Save your program as `phone_number_converter.py` and submit it along with a screenshot showing **both** test cases.

Terminal

```
$ python phone_number_converter.py
Enter a telephone number: 555-New-Cars
The phone number is 555-639-2277
```