

Home Addresses

Problem ID: a11p01homeaddresses

Write a program that continuously asks the user for home addresses, one at a time until the user types in “q” to stop. The program should put the addresses into a list and then process the list into a list of tuples containing the street name and number. Display the list and the tuple list.

Input

First, the program should prompt the user for a home address, this prompt then repeats until the user inputs “q”.

In other words, the program should expect the input to be a sequence of n lines containing home addresses, followed by a final line containing the single character “q”, making up $n + 1$ lines in total, where $n \geq 0$.

In the tests the addresses will be restricted to a single word and an integer, separated by a space.

A word is defined as a series of English or Icelandic letters, each word is composed of 3 to 15 letters, and each integer is composed of 1 to 4 digits with no leading zeroes.

Output

The output should consist of two lines. The first line should contain a list of all addresses input. The second line should contain a list of tuples where each address has been split up into a tuple of “(word, integer)”.

Sample Input 1

```
Menntavegur 1
Dúfnahólar 10
Bankastræti 5
q
```

Sample Output 1

```
['Menntavegur 1', 'Dúfnahólar 10', 'Bankastræti 5']
[('Menntavegur', '1'), ('Dúfnahólar', '10'), ('Bankastræti', '5')]
```

Sample Input 2

```
q
```

Sample Output 2

```
[]
[]
```

Sample Input 3

```
Skeifan 15
Faxafen 1000
Runnaflöt 4
Aðalstræti 1
q
```

Sample Output 3

```
['Skeifan 15', 'Faxafen 1000', 'Runnaflöt 4', 'Aðalstræti 1']
[('Skeifan', '15'), ('Faxafen', '1000'), ('Runnaflöt', '4'), ('Aðalstræti', '1')]
```