

Another Python Assignment

Complete the following function stub properly

```
def IsTurkish(L, allowPrint = False):  
    return A,W,b
```

so that

- **L** being a list of single characters. Meaningless characters (i.e. that do not show up in Turkish letters) in **L** can safely be ignored. Repeated letters indicates how many times they can be used within a word. Therefore if ['a' , 'a' , 'b'] are passes you can form **aba** but not **baba** since there is only 1 **b** passed.
- Function call will return **A,W** and **b** where
 - **A** is a list containing all possible combinations of letters in **L**
 - **W** is a list containing all Turkish words that can be obtained by using letters in **L**.
 - **b** is a bonus indicator wich is a binary number of the form **xy**
 - **b = 0** if no bonus implementation exist in the file
 - **b = 2** if Recursive part implemented alone etc.
- Only letters that have 2 or more letters should be selected from the dictionary.
- Search in the dictionary should be case insensitive. If library has words that start with capital letters, or same word one starting with a lower and other with upper case letter, you can ignore the words that start with uppercase letters.
- The reference dictionary is on this [github page](#)¹. You can assume that this file will be available on the current folder with your python file and named as **tk.txt**.
- If **allowPrint** is **True**:
 - Function can print if there is a problem in the way function is called.
 - At the end, the function should print all combinations with green if it is in the dictionary, red if not. Print should start with 1 letter alternatives all the way to **n**, where **n** is the number of meaningful letters passed. Each block should be in alphabetical order. If you struggle with colored printing you can use **xyz - 0** to indicate that xyz is not in the dictionary, whereas **xyz - 1** means otherwise. But color print will get you more points.
- note that ' ' indicates a space, and if passed within **L** , words like 'bahtlı açık' can be found.

Name your python file as **IsTurkish123.py** where as usual 123 is your student number.

Your **IsTurkish123.py** file should also be directly callable from the command line as:

python3 IsTurkish123 a b ... e where letters are passes as shown with spaces as many as desired. If space is desired it has to be passes as ' '. Given that this is not a function call, but indeed we do run the script from the shell, we do not expect the returned values (i.e.), but results should be printed in the same way your function does when **allowPrint** is set to **True**.

BONUS(es):

Recursive implementation: (x = 1 if implemented else 0)

If a character is given as 'a2' it means there can be upto 2 a's in a word, those who are not aiming for this bonus can ignore these characters: **(y = 1 if implemented else 0)**

Fastest code(s) will also be given points if significantly faster than others.

NOTE: Your code should NEVER crash, no matter how we call the function, if craps comes in you are the boss to decide on what kind of crap goes out... Entertain us :)

¹ https://raw.githubusercontent.com/CanNuhlar/Turkce-Kelime-Listesi/master/turkce_kelime_listesi.txt