

ENGL 516X:
Methods of Formal Linguistic Analysis
Semester: Spring '18

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Class outline

- ▶ Assignment 5 description
- ▶ Tuesday's last question
- ▶ Final project ideas and discussion

Notes from Midterm feedback-1

Delta for me

- ▶ More time to practice step by step (👍)
- ▶ More explanations needed, more repetitions needed (👍)
- ▶ Clearer instructions about Assignments (👍)
- ▶ More real life examples (👍)
- ▶ Assignments don't coincide with what is taught in class (Really?)
- ▶ Group work from beginning
- ▶ Exercise time spread out in the class, not in the end.
- ▶ Let us choose groups
- ▶ Flipped classroom

Notes from Midterm feedback-2

Delta for you

- ▶ Practice more outside class
- ▶ Work on the program a little bit before searching internet for help
- ▶ Office hours
- ▶ Participate more in the forum

Discussion on Tuesday's last question

Write a small program now using regex, which takes a word as input and returns the plural word as output. Here are the rules to code:

- ▶ If a word ends in s, x, or z, add es to the end of the word.
- ▶ If a word ends in a consonant +y, add ies to the word (removing y). If a word ends in a vowel+y, add s in the end (vacancy is vacancies but day is days)
- ▶ If none of the above cases are valid for a word, just add s at the end of the word and be happy with that.

(Your input should not be a number or a string with numbers, punctuation etc. It has to be an alphabetic string.)

Your solutions - Discussion

Taichi's solution

```
import re

word = input('Enter a word in its singular form: ')
plural = ""

if re.match("\w+(s|x|z)",word):
    plural = word + "es"
elif re.match("\w+(a|e|i|o|u)y", word):
    plural = word + "s"
elif re.match("\w+y", word):
    word_list = list(word)
    word_list[-1] = "i"
    word = "".join(word_list)
    plural = word + "es"
else:
    plural = word + "s"

print(plural)
```

- What do you think this prints, if I give "boxy" as input? (expected output: boxies)

Emily's solution

```
import re
try:
    user_input = str(input("Please enter a word to make it plural: "))
    if user_input.isalpha():
        if re.search("[sxz]$", user_input):
            plural = user_input + "es"
            print(plural)
        elif re.search("[qwrtpsdfghjklzxcvbnm]y$", user_input):
            user_input.split()
            plural = user_input[0:-1] + "ies"
            print(plural)
        else:
            print(user_input + "s")
    else:
        print("Please enter a string.")
except:
    print("There was an error.")
```

(My addition: in your elif, you can put "[^aeiou]" instead. I don't understand the split() call though.

Fatemeh's solution

```
import re
while True:
    try:
        word= str(input("please enter a word: "))
        if word.isalpha():
            if re.search("\w+(s|x|z)", word):
                word = word+"es"
            elif re.search("\w+(b|c|d|f|g|h|j|k|l|m|n|p|q|r|t|s|v|w|x|y|z)y", word):
                word = word[0:-1] + "ies"
            elif re.search("\w+(a|e|o|u|i)y", word):
                word = word + "s"
            else:
                word = word + "s"
            print (word)
        else:
            print("the input is not valid")
    except:
        print( "please enter a word: ")
        continue
```

Comments: Same issue as Taichi's. In Regular expression, you can use square brackets, and ^ symbol for elegance in code. But, does this code ever stop?

Assignment and Project Groups

(I am just putting official first names here)

- ▶ Group 1: Fatemeh, Nazlinur, Agustinus
- ▶ Group 2: Sondoss, Yasin, Taichi
- ▶ Group 3: William, Haeyun, Timothy
- ▶ Group 4: Afnan, Kristin
- ▶ Group 5: Brody, Emily

Note: Contrary to what some of you thought, I actually did think about whom to put together. I wanted to put people with varying skill levels together (from my perspective), except for Group 5 (as they are the only two undergrads in the class).

Assignment 5 description

- ▶ Deadline: March 24th
- ▶ Questions: 3 questions, Answer any 2. (I would strongly recommend not skipping Question 1)
- ▶ Submission: One submission per group!
- ▶ Question 1: Using terminal in MacOS/Linux/Windows 10+
- ▶ Question 2: Implementing a sorting function yourself
- ▶ Question 3: Implementing a searching function yourself (This is more difficult than the other two)
- ▶ You can do all 3 and get bonus credit of 2% in the final grade, if you want.

Final Project: how is the grade split?

- ▶ 30% of your total grade
- ▶ 10% for a short oral presentation in the finals week.
- ▶ 20% for the code and a report, due on May 1st. (5% for user interface, 10% for other part of the code, 5% for the report).
- ▶ Some project ideas on Canvas

Discussion Time

- ▶ Time for your ideas! (discuss with your team)
- ▶ I will ask all teams to present their ideas in a few min.
- ▶ You should also post your idea (just a small paragraph) on the discussion forum (one post per team)

Week after break

- ▶ Working with databases
- ▶ databases + bottle
- ▶ Assignment 5 will be due at the end of that week.

Happy Spring break!!