

Meeting 10 Exercises

Info 206

26 September 2017

Due: Friday 29 September 2017 11:59 PM

Write individual scripts to solve the following exercises.

1. Email pattern matching

Write a regular expression that works with the following function to match valid email addresses.

```
import re # Import regular expressions package

# Email matching function
def find_email(your_pattern, emails):
    pattern = re.compile(your_pattern)
    for email in emails:
        if not re.match(pattern, email):
            print("%s is not a valid email address" % (email))
        elif not your_pattern:
            print("Please enter a pattern to match.")
        else:
            print("Pass")
#####

emails = ["joesmith@excite.com", "pythonista@python.org", "wha.t.`1an?ug{}ly@email.com"]

pattern = r"" # Insert your pattern here.
find_email(pattern, emails)
```

Save your script as emails_[lastname].py

2. Complete the baby names exercise for regular expressions at <https://developers.google.com/edu/python/exercises/baby-names>

Try to avoid looking at the solutions until you have given it a full effort! Save your script as baby-names_[lastname].py

3. Write a module that contains functions to take a poem and perform the following

- a. Take a numeric argument and print the paragraph in the poem that corresponds to the integer argument. For example, when the following poem is passed through the function with an argument paragraph = 2,

```
file_content = '''The time will come
when, with elation,
you will greet yourself arriving
at your own door, in your own mirror,
and each will smile at the other's welcome,
and say, sit here. Eat.
You will love again the stranger who was your self.
Give wine. Give bread. Give back your heart
to itself, to the stranger who has loved you

all your life, whom you ignored
for another, who knows you by heart.
Take down the love letters from the bookshelf,

the photographs, the desperate notes,
peel your own image from the mirror.
Sit. Feast on your life.'''
```

it returns

```
all your life, whom you ignored
for another, who knows you by heart.
Take down the love letters from the bookshelf,
```

- b. Write a function that takes a poem and prints all words that begin with the letter “p” (case insensitive).
- c. Write a function that takes a poem and returns a list of all letters that end a sentence. (exclude the dot/period)
- d. Include in your script statements that work on the poem above as well as the poem you submitted in exercise 6.