

CSC 241: Introduction to Computer Science I

Lab 2 (10 pts)

Create a file named lab2.py.

- Defs - In this file, write a function definition (`def`) for each problem.
- Shell - In the shell, run tests for each function.
- Doctest – copy the test file to your working folder. Add the doctest to the bottom of your file. Run the doctest, fix any errors that occur.
- Submit – submit your .py file to d2l.

1. Initials: write a function `initials` that inputs the first and last names of the user and then prints their initials. For example, after your function is written and run, this should work in the shell,

```
>>> initials()
Please enter your first name: Jane
Please enter your last name: Jones
Jane Jones your initials are JJ
>>> initials()
Please enter your first name: george
Please enter your last name: orwell
george orwell your initials are go
>>>
```

2. Consonant/vowel detector: Write a function `corv` that asks the user to input a lower case character. The function then prints a statement that says whether the character is a vowel or a consonant. (Hints: use the `in` operator with either a list or string, we will consider a vowel to be one of a,e,i,o or u). For example,

```
>>> corv()
Please enter a lower case letter: k
k is a consonant
>>> corv()
Please enter a lower case letter: i
i is a vowel
>>> corv()
Please enter a lower case letter: y
y is a consonant
>>>
```

3. Pig Latin Translator. Write a (simple) function `pigLatin` that translates a word into Pig Latin. Ask the user to input a word (all in lower case). If the word begins with a vowel, translate it to the same word with "ay" at the end. If it begins with a consonant, move the consonant to the end and at "ay". For example

```
>>> pigLatin()
English to Pig Latin Translator
Please enter a lower case English word: apple
apple translates to appleay
>>> pigLatin()
English to Pig Latin Translator
Please enter a lower case English word: pear
pear translates to earpay
>>> pigLatin()
English to Pig Latin Translator
Please enter a lower case English word: book
book translates to ookbay
>>> pigLatin()
English to Pig Latin Translator
Please enter a lower case English word: owl
owl translates to owlai
>>>
```

Optional (for fun if you like, no additional credit, there is no doctest for this function): Better Pig Latin Translator. Write a Pig Latin Translator that can move from 0-3 (or more?) consonants at the beginning of a word to the end. For example:

```
>>> pigLatinBetter()
English to Pig Latin Translator
Please enter a lower case English word: chow
chow translates to owchay
>>> pigLatinBetter()
English to Pig Latin Translator
Please enter a lower case English word: string
string translates to ingstray
>>>
```