## **Practice Quiz: Advanced Regular Expressions**

## **TOTAL POINTS 5**

We're working with a CSV file, which contains employee information. Each record has a name field, followed by
a phone number field, and a role field. The phone number field contains U.S. phone numbers, and needs to be
modified to the international format, with "+1-" in front of the phone number. Fill in the regular expression,
using groups, to use the transform\_record function to do that.

```
import re
     def transform record(record):
       new_record = re.sub(r"([\w\s]*),([\d-]*),([\w\s]*)",r"\1,+1-\2,\3",record)
       return new record
     print(transform record("Sabrina Green,802-867-5309,System Administrator"))
     # Sabrina Green, +1-802-867-5309, System Administrator
     print(transform record("Eli Jones,684-3481127,IT specialist"))
     # Eli Jones, +1-684-3481127, IT specialist
11
     print(transform record("Melody Daniels,846-687-7436,Programmer"))
     # Melody Daniels,+1-846-687-7436,Programmer
14
                                                                                 Run
     print(transform record("Charlie Rivera,698-746-3357,Web Developer"))
                                                                                 Reset
     # Charlie Rivera,+1-698-746-3357,Web Developer
```

1/1 point

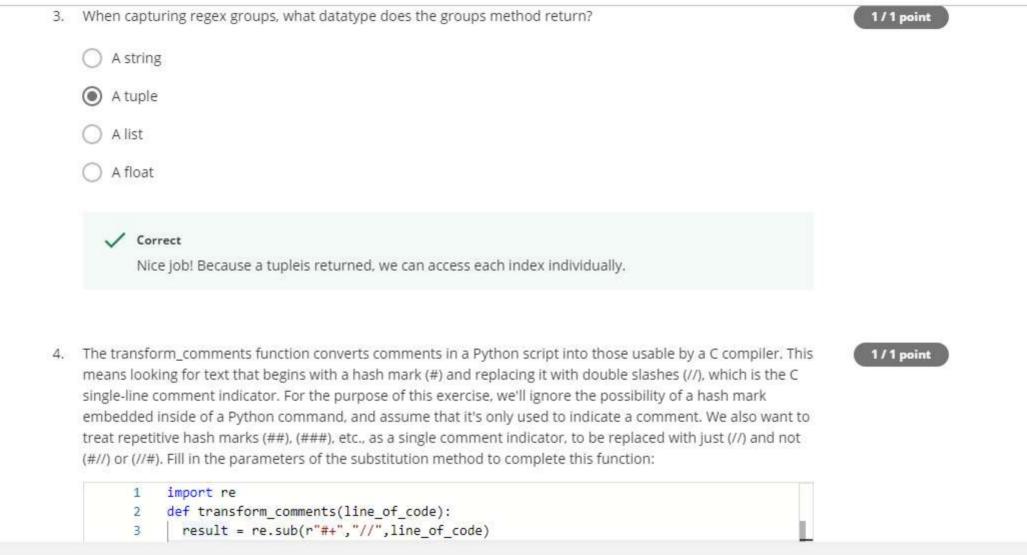
4

```
regular expression to do that.
           def multi vowel words(text):
             pattern = "[\w?]*[aeiouAEIOU]{3,}[\w?]*"
             result = re.findall(pattern, text)
             return result
           print(multi vowel words("Life is beautiful"))
           # ['beautiful']
           print(multi vowel words("Obviously, the queen is courageous and gracious."))
           # ['Obviously', 'queen', 'courageous', 'gracious']
     12
           print(multi vowel words("The rambunctious children had to sit quietly and await thei
           # ['rambunctious', 'quietly', 'delicious']
     15
           print(multi_vowel_words("The order of a data queue is First In First Out (FIFO)"))
           # ['queue']
     18
                                                                                        Run
           print(multi_vowel_words("Hello world!"))
     20
          # []
                                                                                       Reset
   ['beautiful']
   ['Obviously', 'queen', 'courageous', 'gracious']
   ['rambunctious', 'quietly', 'delicious']
```

['queue']

2. The multi vowel words function returns all words with 3 or more consecutive vowels (a, e, i, o, u). Fill in the

1/1 point



4. The transform\_comments function converts comments in a Python script into those usable by a C compiler. This means looking for text that begins with a hash mark (#) and replacing it with double slashes (//), which is the C single-line comment indicator. For the purpose of this exercise, we'll ignore the possibility of a hash mark embedded inside of a Python command, and assume that it's only used to indicate a comment. We also want to treat repetitive hash marks (##), (###), etc., as a single comment indicator, to be replaced with just (//) and not (#//) or (//#). Fill in the parameters of the substitution method to complete this function:

```
import re
        def transform comments(line of code):
          result = re.sub(r"#+","//",line_of_code)
          return result
        print(transform comments("### Start of program"))
        # Should be "// Start of program"
        print(transform comments(" number = 0 ## Initialize the variable"))
        # Should be " number = 0 // Initialize the variable"
        print(transform comments(" number += 1  # Increment the variable"))
        # Should be " number += 1 // Increment the variable"
                                                                                  Run
        print(transform_comments(" return(number)"))
                                                                                  Reset
        # Should be " return(number)"
// Start of program
 number = 0 // Initialize the variable
 number += 1 // Increment the variable
 return(number)
```

4

```
Please call (888) 555-1234
123-123-12345
Phone number of Buckingham Palace is +44 303 123 7300
```

✓ Correct

My number is (212) 345-9999.

Well done! You've captured the right groups to identify what we're looking for, and nothing else!