Code & Solution

Team ID	PNT2022TMID41774
Project Name	Emerging Methods For Early Detection of Forest Fires
Maximum Marks	2 Marks

Code Layout:
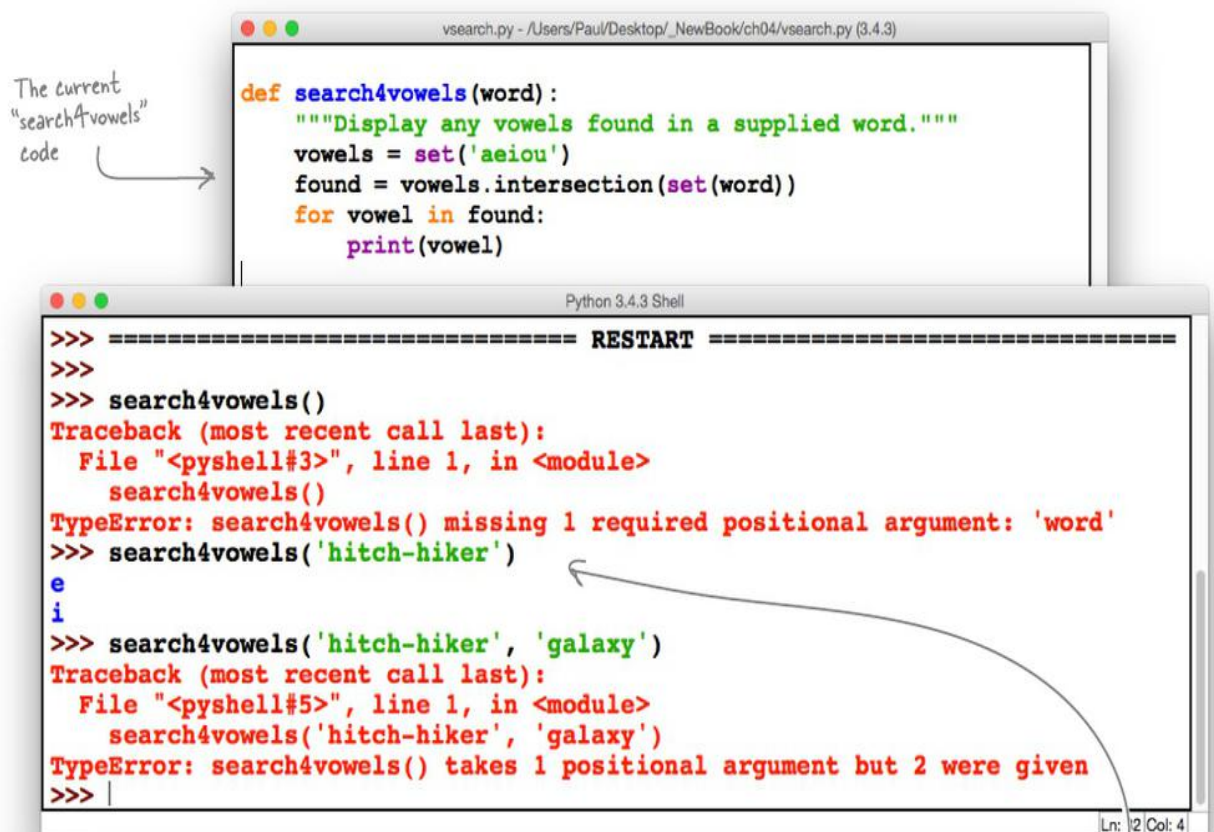
- AnchorLayout

- RelativeLayout

- StackLayout

- BoxLayout

Reusability:

➤ Although a few lines of code can accomplish a lot in Python, sooner or later you're going to find your program's codebase is growing...and, when it does, things quickly become harder to manage.

➤ Python supports modularity, in that you can break large chunks of code into smaller, more manageable pieces. You do this by creating functions, which you can think of as named chunks of code.

Readability:

- Readable code saves future developers' time and effort. Code readability is key for large software projects with many developers, and where the source code that is being written will have to be modified by another person.

The current "search4vowels" code

```python
def search4vowels(word):
    """Display any vowels found in a supplied word."""
    vowels = set('aeiou')
    found = vowels.intersection(set(word))
    for vowel in found:
        print(vowel)
```

vsearch.py - /Users/Paul/Desktop/_NewBook/ch04/vsearch.py (3.4.3)

Python 3.4.3 Shell

```
>>> ============================== RESTART ==============================
>>>
>>> search4vowels()
Traceback (most recent call last):
  File "<pyshell#3>", line 1, in <module>
    search4vowels()
TypeError: search4vowels() missing 1 required positional argument: 'word'
>>> search4vowels('hitch-hiker')
e
i
>>> search4vowels('hitch-hiker', 'galaxy')
Traceback (most recent call last):
  File "<pyshell#5>", line 1, in <module>
    search4vowels('hitch-hiker', 'galaxy')
TypeError: search4vowels() takes 1 positional argument but 2 were given
>>>
```

Ln: 12 Col: 4

Although we've invoked the "search4vowels" function three times in this Test Drive, the only invocation that ran successfully was the one that passed in a single, stringed argument. The other two failed. Take a moment to read the error messages produced by the interpreter to learn why each of the incorrect calls failed.