hw7 p2 answer

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1 Assignment 7 part2

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1.0.3 Nov. 20

1.0.4 2. Test driven development

2(a) and 2(b) Here is the code to calculate the interest rate by using the function get_r().

```
In [1]: def get_r(K, L, alpha, Z, delta):
            '''This function could generate the interest rate or vector of interest rates'''
            return alpha*Z*((L/K)**(1-alpha))-delta
```

This function could handle both scalars and vector cases of K and L.

2(c) The function get_r() is saved in file "get_r.py" and test cases in "test_r.py ".
Then I ran "py.test --cov" to test. The coverage is 100% for both files.

```
In [3]: !py.test --cov

=========================== test session starts ===========================
platform win32 -- Python 3.6.5, pytest-3.5.1, py-1.5.3, pluggy-0.6.0
rootdir: C:\Users\pcc\Desktop\persp-analysis_A18-master\Assignments\A7\problem2, inifile:
plugins: remotedata-0.2.1, openfiles-0.3.0, doctestplus-0.1.3, cov-2.6.0, arraydiff-0.2
collected 244 items

test_r.py ... [ 25%]
... [ 54%]
... [ 84%]
...                                      [100%]

----------- coverage: platform win32, python 3.6.5-final-0 -----------
Name          Stmts   Miss  Cover
------------------------------
get_r.py          3      0   100%
```

1

```
test_r.py          29      0   100%
-----------------------------
TOTAL              32      0   100%


========================= 244 passed in 2.37 seconds =========================
```