

hw7 Problem2

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1 Assignment 7 Part 2

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Due Monday, Nov. 26 at 11:30 AM

1.0.3 2. Test driven development

(b) Here is my code to build get_r.py.

```
In [1]: import numpy as np
def get_r(K, L, alpha, Z, delta):
    '''This function generates the interest rate or vector of interest rates'''
    if type(K) == type(L) and 0 < alpha < 1 and 0 < delta < 1 and Z > 0:
        if K > 0 and L > 0:
            r = alpha * Z * ( L / K ) ** ( 1 - alpha ) - delta
            return r
        elif len(K) == len(L):
            r = np.zeros(len(K))
            for i in range(len(K)):
                if K[i] <= 0 or L[i] <=0:
                    return
                else:
                    r[i] = alpha * Z * ( L[i] / K[i] ) ** ( 1 - alpha ) - delta
            return r
        else:
            return
    else:
        return
```

(c) Here is my pytest code and result.

```
In [2]: ! py.test
```

```
===== test session starts =====
platform win32 -- Python 3.6.4, pytest-4.0.0, py-1.7.0, pluggy-0.8.0
rootdir: C:\Users\ccb\Desktop\Perspective\persp-analysis_A18\Assignments\A7\Problem 2, inifile
```

```
plugins: cov-2.6.0  
collected 244 items
```

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

```
[100%]
```

```
===== 244 passed in 0.53 seconds =====
```