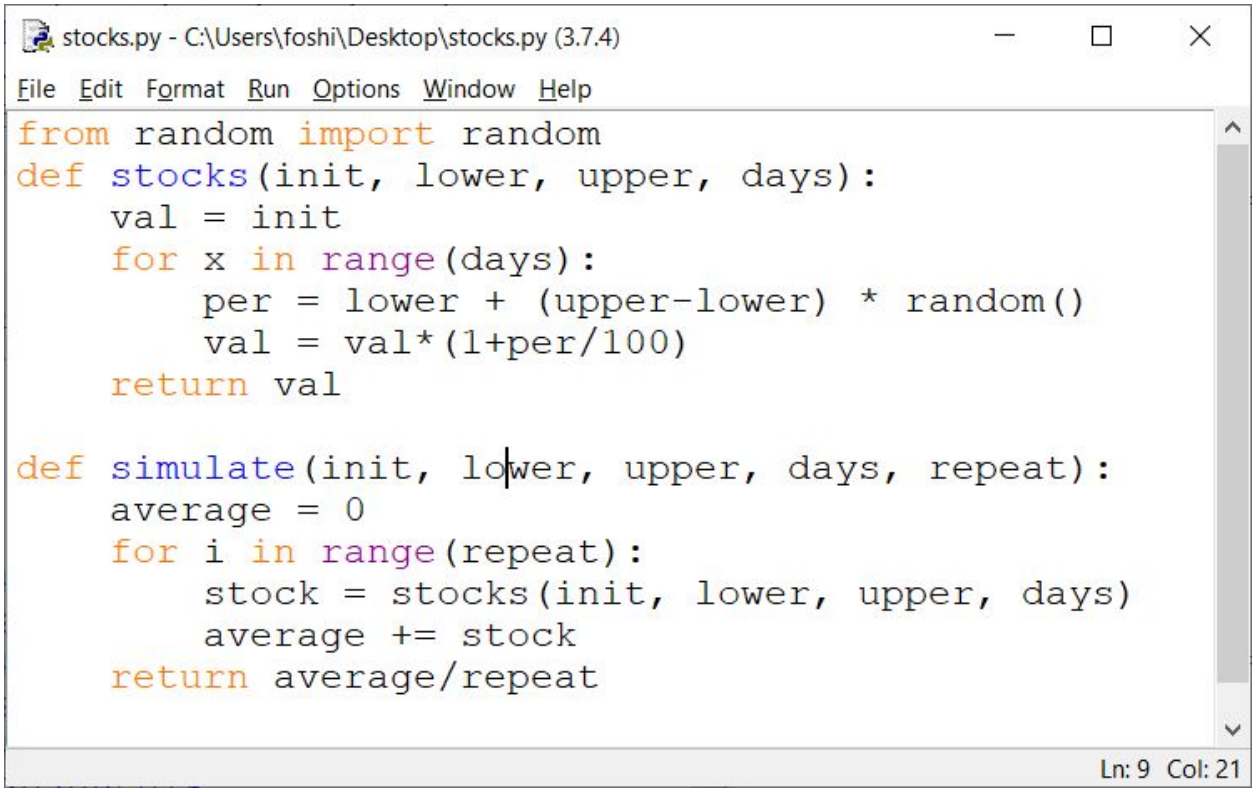
2.




```
>>> stocks(1000,2.5,2.5,100)
11813.716351062087
>>> stocks(1000,2.5,2.5,100)
11813.716351062087
>>> stocks(1000,-3.2,4.3,10)
924.3820303096015
>>> stocks(1000,-1,-1,100)
366.03234127322895
>>> stocks(1000, -3, 4,10)
1102.77590256652
>>> stocks(1000, -3, 4,10)
1170.8519604530184
```

```
>>> simulate(1000,2.5,3.1,100,500)
15815.4301143528
>>> simulate(1000,2.5,3.1,100,500)
15830.3495508980 12
>>> simulate(1000,-2.5,3.1,100,500)
1326.9875207346308
>>> simulate(1000,-3,4,100,500)
1646.1856166351865
```

3a+b.

words.py - C:\Users\foshi\Desktop\Files\Programs\words.py (3.7.4)

File Edit Format Run Options Window Help

```
def find(words1,words2):
    wordlst = []
    for i in range(len(words1)):
        word = words1[i]
        if word in words2:
            wordlst.append(word)
    return wordlst

import re
def find_words(wordlst, fname = 'innocents.txt'):
    infile = open(fname,'r')
    lines = infile.readlines()
    infile.close()
    for x in range(len(wordlst)):
        for i in range(len(lines)):
            line = lines[i]
            words = re.split(r'\W+', line)
            if wordlst[x] in words:
                print('Found ' + wordlst[x] + ' in the following line:\n' + lines[i])
```

3a.

```
>>> find(['cat','dog','fish','bat'],['bat','hog','dog','bird'])
['dog', 'bat']
>>> find(['cat','dog','fish','bat'],['bag','hog','doc','bid'])
[]
>>> find(['swing','hello','bird','goose'],['bat','dog','swing','goose'])
['swing', 'goose']
>>> find(['doc'],['sugar','tea','hello'])
[]
>>> find(['doc'],['sugar','tea','hello','doc'])
['doc']
>>> find(['sugar','tea','hello'],['doc'])
[]
>>>
```

3b.

words.py - C:\Users\foshi\Desktop\Files\Programs\words.py (3.7.4)

File Edit Format Run Options Window Help

```
def find(words1,words2):
    wordlst = []
    for i in range(len(words1)):
        word = words1[i]
        if word in words2:
            wordlst.append(word)
    return wordlst

import re
def find_words(wordlst, fname = 'innocents.txt'):
    infile = open(fname,'r')
    lines = infile.readlines()
    infile.close()
    for x in range(len(wordlst)):
        for i in range(len(lines)):
            line = lines[i]
            words = re.split(r'\W+', line)
            if wordlst[x] in words:
                print('Found ' + wordlst[x] + ' in the following line:\n' + lines[i])
```

4.

- C:/Users/foshi/Desktop/Files/Programs/nice.py (3.7.4)

Format Run Options Window Help

```
ice(lst):
alue = False
or i in range(len(lst)):
   if(lst[0] <= 0 or lst[0] > 100):
       return False
   if(lst.count(lst[i]) >= 2):
      return False
   if(i > 0):
       if((lst[i] % lst[i-1] == 0) or (lst[i-1] % lst[i] == 0)) and (lst[i] <= 
           value = True
       else:
           return False
eturn value
```

Python 3.7.4 Shell

File Edit Shell Debug Options Window Help

```
Python 3.7.4 (tags/v3.7.4:e09359112e, Ju
(Intel)] on win32
Type "help", "copyright", "credits" or "
>>>
========== RESTART: C:/Users/foshi/Deskt
>>> nice([2,1,5,105,3])
False
>>> nice([2,1,5,45,3])
True
>>> nice([88,44 ,22,11,33,66,6,84])
True
>>> nice([88,44 ,22,11,11,33,66,6,84])
False
>>> nice([5,25,10,11,53,76])
False
>>> nice([3, 9,18,36,12 ,72,24,48])
True
>>>
```