Trace the output of the following programs. Make sure you are working on paper, not on a computer.

```
x = 'one'
y = 'two'

counter = 0
while counter < len(x):
    print (x[counter], y[counter])
    counter+=1</pre>
```

```
x = 'apple, pear, peach, grapefruit'
y = x.split(',')

for z in y:
    if z < 'm':
        print (str.lower(z))
    else:
        print (str.upper(z))</pre>
```

```
text="""There was once a sweet little maid who lived with her father and
mother in a pretty little cottage at the edge of the village. At the
further end of the wood was another pretty cottage and in it lived her
grandmother."""

i = text.index('a')
print(i)
print(text.index('a', i+1))

words = text.split()

print(len(words))
print(len(words[5]))
print( words.index('father'))
print( words[words.index('cottage')])
```