Practice Problem 5.1

I wrote the following program, which is supposed to delete every other item on the list stored in the variable numbers. By looking at the output, it is clear that it doesn't work? Why? Can you fix my program?

```
# prob5.1.py
numbers = [0, 1, 2, 3, 4, 5, 6, 7]

print( numbers )

# Remove every other item on the list
i = 0
while i < len( numbers ):
    del numbers[i]
    i = i + 2

print( numbers )

# Printed output
# [0, 1, 2, 3, 4, 5, 6, 7]
# [1, 2, 4, 5, 7]
```

Practice Problem 5.2

Rewrite the following program in a functional programming style using map().

```
L = [1, 2, 3, 4, 5]

def squareIt( x ):
    return x * x

squares = []
for e in L:
    squares.append( squareIt(e) )

print( squares )
```

Practice Problem 5.3

Rewrite the program in 5.2 using list comprehensions.