

break and continue in for loops

The `break` and `continue` clauses work the same in `for` loops like they do in `while` loops

Write a program that prints the square of every third integer in the range 1 to 45. However, if the square is a multiple of 5, that value must not be printed and the program must skip the current iteration with a `continue` statement.

In [1]:

```
for i in range(1,46,3):
    n = i**2
    if n % 5 == 0:
        print('{} is a multiple of 5 and therefore will not be printed'.format(n))
        continue
    print(n)
```

```
1
16
49
100 is a multiple of 5 and therefore will not be printed
169
256
361
484
625 is a multiple of 5 and therefore will not be printed
784
961
1156
1369
1600 is a multiple of 5 and therefore will not be printed
1849
```

Write a program to accept a string value from the user. The program should print each character in the string in a line by itself. However, if the character is a 'z', the program should exit the loop with a `break` statement.

In [3]:

```
inline = input('Enter a string: ')

#Note the syntax. Each time execution enters the loop, i is assigned the value of next character
in the string.
for i in inline:
    if i == 'z':
        print('Character \'z\' encountered. Exiting the program')
        break
    print(i)
```

Enter a string: Amerzica

A
m
e
r

Character 'z' encountered. Exiting the program