Statements Assessment Test

Lets test your knowledge!

Use for, split(), and if to create a Statement that will print out words that start with 's':

In [1]:
```
st = 'Print only the words that start with s in this sentence'
```

In [3]:
```
for word in st.split():
    if word[0]=='s':
        print word
    else:
        pass
```

```
start
s
sentence
```

In [42]:
```
#Code here
st = 'Print only the words that start with s in this sentence'
for word in st.split():
    if word[0]=='s':
        print word
```

```
start
s
sentence
```

Use range() to print all the even numbers from 0 to 10.

In [7]:
```
s = [x for x in range(11) if x%2==0]
print s
```

```
[0, 2, 4, 6, 8, 10]
```

In [8]:
```
for x in range(11):
    if x%2 ==0:
        print x
    else:
        pass
```

```
0
2
4
6
8
10
```

In [9]:
```
#Code Here
for item in range (0,11):
    if item % 2 == 0:
        print item
```

```
0
2
4
6
8
10
```

In [39]:
```
[item for item in range (0,11) if item%2.0==0]
```

Out[39]: [0, 2, 4, 6, 8, 10]

In [43]:
```
range(0,11,2)
```

Out[43]: [0, 2, 4, 6, 8, 10]

Use List comprehension to create a list of all numbers between 1 and 50 that are divisible by 3.

In [10]:
```
s =[x for x in range (1,51) if x%3==0]
print s
```

```
[3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48]
```

In [38]:
```
#Code in this cell
[item for item in range(1,51) if item%3==0]
```

Out[38]: [3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48]

Go through the string below and if the length of a word is even print "even!"

In [11]:
```
st = 'Print every word in this sentence that has an even number of letters'
st
```

Out[11]:
```
'Print every word in this sentence that has an even number of letters'
```

In [13]:
```
for word in st.split():
    if len(word)%2==0:
        print word + ' has an even number of letters'
```

```
word has an even number of letters
in has an even number of letters
this has an even number of letters
sentence has an even number of letters
that has an even number of letters
an has an even number of letters
even has an even number of letters
number has an even number of letters
of has an even number of letters
```

In [47]:
```
#Code in this cell
st = 'Print every word in this sentence that has an even number of letters'
for word in st.split():
    if len(word)%2==0:
        print word + ' is an even number'
```

```
word is an even number
in is an even number
this is an even number
sentence is an even number
that is an even number
an is an even number
even is an even number
number is an even number
of is an even number
```

Write a program that prints the integers from 1 to 100. But for multiples of three print "Fizz" instead of the number, and for the multiples of five print "Buzz". For numbers which are multiples of both three and five print "FizzBuzz".

In [16]:
```
for x in range(1,101):
    if x%3==0 and x%5==0:
        print 'FizzBuzz'
    elif x%5==0:
        print 'Buzz'
    elif x%3 == 0 :
        print 'Fizz'
    else:
        print x
```

```
1
2
Fizz
4
Buzz
Fizz
7
8
Fizz
Buzz
11
Fizz
13
14
FizzBuzz
16
17
Fizz
19
Buzz
Fizz
22
23
Fizz
Buzz
26
Fizz
28
29
FizzBuzz
31
32
Fizz
34
Buzz
Fizz
37
38
Fizz
Buzz
41
Fizz
43
44
FizzBuzz
46
```

47
Fizz
49
Buzz
Fizz
52
53
Fizz
Buzz
56
Fizz
58
59
FizzBuzz
61
62
Fizz
64
Buzz
Fizz
67
68
Fizz
Buzz
71
Fizz
73
74
FizzBuzz
76
77
Fizz
79
Buzz
Fizz
82
83
Fizz
Buzz
86
Fizz
88
89
FizzBuzz
91
92
Fizz
94
Buzz
Fizz
97
98
Fizz
Buzz

In [27]:
```
#Code in this cell
x= range (1,101)

for number in x:
    if number %3 ==0 and number %5==0:
        print 'FizzBuzz'
    elif number%3==0:
        print 'Fizz'
    elif number%5==0:
        print 'Buzz'
    else:
        print number
```

```
1
2
Fizz
4
Buzz
Fizz
7
8
Fizz
Buzz
11
Fizz
13
14
FizzBuzz
16
17
Fizz
19
Buzz
Fizz
22
23
Fizz
Buzz
26
Fizz
28
29
FizzBuzz
31
32
Fizz
34
Buzz
Fizz
37
38
Fizz
Buzz
41
Fizz
43
```

44
FizzBuzz
46
47
Fizz
49
Buzz
Fizz
52
53
Fizz
Buzz
56
Fizz
58
59
FizzBuzz
61
62
Fizz
64
Buzz
Fizz
67
68
Fizz
Buzz
71
Fizz
73
74
FizzBuzz
76
77
Fizz
79
Buzz
Fizz
82
83
Fizz
Buzz
86
Fizz
88
89
FizzBuzz
91
92
Fizz
94
Buzz
Fizz
97
98
Fizz
Buzz

Use List Comprehension to create a list of the first letters of every word in the string below:

In [17]:
```
st = 'Create a list of the first letters of every word in this string'
```

In [18]:
```
[x[0] for x in st.split()]
```

Out[18]:
```
['C', 'a', 'l', 'o', 't', 'f', 'l', 'o', 'e', 'w', 'i', 't', 's']
```

In [54]:
```
#Code in this cell
st = 'Create a list of the first letters of every word in this string'
l = [word[0] for word in st.split()]
l
```

Out[54]:
```
['C', 'a', 'l', 'o', 't', 'f', 'l', 'o', 'e', 'w', 'i', 't', 's']
```

Great Job!