

while -> während

arbeiten mit einer Bedingung -> Boolean z.B.  $x < 10$  solange diese Bedingung `True` ist, wird die Schleife wiederholt Achtung: Endlosschleife

for

laufen über ein Objekt -> Iterable

In [2]:



```
1 x = 0
2
3 while x < 10:
4     print(x)
5     x += 1 # x = x + 1
6
7 print('Schleife beendet')
```

```
0
1
2
3
4
5
6
7
8
9
Schleife beendet
```

In [9]:



```
1 for i in range(-5, 123, 12): # range(start, stop, step)
2     print(i)
```

```
-5
7
19
31
43
55
67
79
91
103
115
```

In [10]:



```
1 text = 'Hello World!'
2
3 for c in text:
4     print(c)
5
```

H  
e  
l  
l  
o  
  
W  
o  
r  
l  
d  
!

break und continue

break : unterbricht eine Schleife und beendet die Schleife

continue : unterbricht eine Schleife und fängt wieder von vorne an

In [14]:



```
1 x = 0
2
3 while True:
4     print('schleife')
5     if x == 4:
6         break
7     print('immer noch schleife?')
8     x += 1
9
10 print('nach der Schleife')
```

schleife  
immer noch schleife?  
schleife  
immer noch schleife?  
schleife  
immer noch schleife?  
schleife  
immer noch schleife?  
schleife  
nach der Schleife

In [18]:



```
1 pw = 'silverfish12'
2
3 while True:
4     user_entry = input('Please enter the password: ')
5     if user_entry == pw:
6         break
7     print('The password is incorrect!')
8
9 print('Access granted!')
```

Please enter the password: Silverfish12  
The password is incorrect!  
Please enter the password: silverfish12  
The password is incorrect!  
Please enter the password: silverfish12  
Access granted!

In [19]:



```
1 pw = 'silverfish12'
2
3 is_pw_correct = False
4
5 while not is_pw_correct:
6     user_entry = input('Please enter the password: ')
7     if user_entry == pw:
8         is_pw_correct = True
9     else:
10        print('The password is incorrect!')
11
12 print('Access granted!')
```

Please enter the password: pass  
The password is incorrect!  
Please enter the password: asdas  
The password is incorrect!  
Please enter the password: asdef  
The password is incorrect!  
Please enter the password: sdfs  
The password is incorrect!  
Please enter the password: silverfish12  
Access granted!

In [23]:



```
1 x = 0
2
3 while x < 5:
4     print(x)
5     x += 1
6     continue
7     print('nach continue')
```

```
0
1
2
3
4
```

In [24]:



```
1 pw1 = 'silver'
2 pw2 = 'fish'
3
4 while True:
5     user_entry_1 = input('FIRST password: ')
6     if user_entry_1 != pw1:
7         print('The password is incorrect!')
8         continue
9     user_entry_2 = input('SECOND password: ')
10    if user_entry_2 != pw2:
11        print('The password is incorrect!')
12        continue
13    break
14
15 print('Access granted!')
```

```
FIRST password: pass
The password is incorrect!
FIRST password: silver
SECOND password: pass
The password is incorrect!
FIRST password: silver
SECOND password: fish
Access granted!
```