

Control Statements

Control Statements

- Used to control the flow of execution through loops.
- Allows the program to break out of a loop when a condition is satisfied
- or continue to the next iteration when an undesirable list item or value is encountered.

Break

- Used to 'break' out of a loop when a condition is satisfied
- Only breaks out of the loop it is in

```
while i < 0.0000209
    do something to l
    if i(t) == i(t-1)
        break
```

Break

```
while i < 0.0000209:  
    do something to i  
    if i(t) == i(t-1)  
        break
```

Could have been accomplished with a more complex while statement

```
e.g. while (i < 0.0000209) and i(t) != i(t-1):  
    do something to i
```

Break

- Break is most useful when dealing with large blocks.

e.g. while $i < 0.0000209$

do something to i

if $i(t) == i(t-1)$

break

do something else to i

compare i to something

do something else to i ...

Continue

- Used to the next iteration. That is, it can be used to 'skip' the current list item.
- Useful when dealing with lists or files that may have nonsensical values or values of no interest

Continue

```
growth_rate = [0, 0.3, 0, 0.4, 0, 0.5]
```

```
for rate in growth_rate:
```

```
    if rate == 0:
```

```
        continue
```

```
    else:
```

```
        calculate time to max. occupancy
```