**Introduction to Python**

**Day Two Cheatsheet: Control Flow**

**Logical Operators and Keywords**

|  |  |  |
| --- | --- | --- |
| Symbol | What it does | Examples |
| == | Equal to | 5 == 5 5 == 7  True False |
| != | Not Equal to | 5 != 5 5 != 7  False True |
| > | Greater than | 5 > 3 5 > 6 5 > 5  True False False |
| < | Less than | 5 < 3 5 < 6 5 < 5  False True False |
| >= | Greater than or equal to | 5 >= 3 5 >= 6 5 >= 5  True False True |
| <= | Less than or equal to | 5 <= 3 5 <= 6 5 <= 5  False True True |
| and | Join logical statements with "and" rules | 5 >= 2 and 3 == 3 5 >= 2 and 3 != 3  True False |
| or | Join logical statements with "or" rules | 5 >= 2 and 3 == 3 5 >= 2 and 3 != 3  True True |

**if-elif-else statements**

if <logical condition> == True:

do this command

if <logical condition> == True:

do this command

else:

do that command

if <logical condition> == True:

do this command

elif:

do that command

else:

do other command

if 7.5 > 3:

print "yes!"

yes

if 7.5 == 3:

print "yes!"

else:

print "no :("

no :(

if 7.5 < 3:

print "less!"

elif 7.5 > 3:

print "greater!"

else:

print "equal!"

greater!

**For-loops**

for item in container:

do this command

**Nested for-loops**

for item in container:

for item2 in container2:

do this command

my\_list = [45, 48, 51, 54.5]

for entry in my\_list:

print entry

45

48

51

54.5

for i in range(5):

print "Iteration" + str(i)

Iteration 0

Iteration 1

Iteration 2

Iteration 3

Iteration 4

count = 0

for i in range(4):

for j in range(3):

count += 1

print count, ":", i, j, i\*j

1: 0 0 0

2: 0 1 0

3: 0 2 0

4: 1 0 0

5: 1 1 1

6: 1 2 2

7: 2 0 0

8: 2 1 1

9: 2 2 4

10: 3 0 0

11: 3 1 3

12: 3 2 0