

Python Crib Sheet

January 14, 2014

Counting from 0 to 9 in steps of 1

```
for i in range(10):  
    print i
```

Counting from 0 to 9 in steps of 2

```
for i in range(0, 10, 2):  
    print i
```

Counting from 10 down to 1

```
for i in range(10, 0, -1):  
    print i
```

A simple nested loop

```
for i in range(10):  
    for j in range(10):  
        print i, ' times ', j, ' is ', i*j
```

An if statement

```
x = 5  
if x<10:  
    print 'x is less than ten'
```

An if-else structure

```
x = 5  
if x<10:  
    print 'x is less than ten'  
else:  
    print 'x is greater than or equal to 10'
```

A if-elif-else structure

```
if x<5:
    print 'x is less than 5'
elif x<10:
    print 'x is in the range 5 to 9'
elif x<15:
    print 'x is in the range 10 to 14'
else:
    print 'x is 14 or larger'
```

Logical tests

```
if x==0:
    print 'x is equal to 0'

if x!=0:
    print 'x is not equal to 0'

if x>0:
    print 'x is greater than 0'

if x>=0:
    print 'x is greater than or equal to 0'
```

Defining and using a function.

```
#defining a two-input function
def myFunction(xinput, yinput):
    output = xinput*3 + yinput*2 + 5
    return output

#using the function
z = myFunction(10, 5)
print z
```

Arithmetic operations

```
z = x + y    # addition
z = x - y    # subtraction
z = x * y    # multiplication
z = x / y    # division
```