

IS833 – Business Analytics in Practice

Python Help Guide

Useful Links:

Resource for all things Python: [link](#)

Resource for Python for people who do not have much programming experience: [link](#)

Dictionary of functions standard in Python: [link](#)

Use this link to understand more about the terms listed below: [link](#)

Terms/Concepts	Use	Example	Link
# (hash)	A character used at the beginning of a line to enter explanatory text ignored by the program	#This is why I did the following command	-
if	Command used to begin a conditional statement	<pre>n = input ("number?") if n < 0: print "The absolute value of", n, "is", -n else: print "The absolute value of", n, "is", n</pre> <p>Output Number? <-34> The absolute value of -34 is 34</p> <pre>print "Hello, World!"</pre> <p>Output Hello, World!</p>	link
else	Command used to tell the program what to do when an "if" statement is false		-
comparison	Concept of comparing two items in a conditional statement (<,>=)		link
print	Command used to tell program to display something on screen		-
input	Command that indicates numerical input expected along with a prompt to the user		-

raw_input	Command that indicates data input and displays a prompt to the user	<pre>print "Halt!" user_reply = raw_input("Who goes there? ") print "You may pass,", user_reply</pre> <p>Output Halt!</p> <p>Who goes there? <Josh></p> <p>You may pass, Josh</p>	link
setting variables	Concept of naming variables for the program to use	-	-
int()	Command that converts a string number to an integer	-	link
float()	Command that converts a string or number to a floating-point decimal number	-	link
boolean variables	Concept of true/false and yes/no variables	<pre>a = 6 b = 7 print 1, a == 6 print 2, a == 7</pre> <p>Output 1 True</p> <p>2 False</p>	link
while	Command used to start a loop	<pre>a = 0 while a < 10: a = a + 1 print a</pre>	link
break	Command used to stop a loop	<pre>x = 5 while x > 0: print x break x -= 1 print x</pre>	-

for	Command used to start another type of loop that sequentially goes through items in a list	<pre>list = [2, 4, 6, 8] sum = 0 for num in list: sum = sum + num print "The sum is:", sum</pre>	link
defining functions	The concept of being able to define certain operations which can be used on multiple arguments	<pre>def absolute_value(n): if n < 0: n = -n return n a = 23 b = -23 if absolute_value(a) == absolute_value(b): print "The absolute values of", a, "and", b, "are equal" else: print "The absolute values of", a, "and", b, "are different" Output The absolute values of 23 and 23 are equal</pre>	link
lists	The concept of using variables with more than one value	<pre>which_one = input("What month (1-12)?") months = ['January', 'February', 'March', 'April', 'May', 'June', 'July', 'August', 'September', 'October', 'November', 'December'] if 1 <= which_one <= 12: print "The month is", months [which_one - 1] Output What month (1-12)? <3> The month is March</pre>	link