Week 3 (Chapter 1)

X=2 < assignment statement

x=x+2<assignment with expression

print(x)< print function

x is a variable, = & + are operators, 2 is constant and print is a function

-Most code scripts are too long to be in Interactive Python, so we put them in files and tell Python the run the commands there

Iteration variables: variables that change each time theyre put through a loop

print(“Hello world!”)> Hello world!

Week 4 (Chapter 2)

Constants are fixed variables like numbers or letters inside quotes

Reserved words have fixed actions and cant be used as variables>false,true,and,as,assert,break,class,if,def,del,elif,else,ecept,return,for,from.global,try,import,etc.

Variable: a named place in memory where a programmer can store data

Good: spam eggs spam23 \_speed

Bad: 23spam #sign ver.12

Different: spam Spam SPAM

A=12

B=10

Print(A\*B)

=120

Assignment Statement: Consists of expression on the right-hand side and a variable to store the result

How to add decimal places > format(variable,’.2f’)( the .2 is the amount of spaces)

Format is a function, similar to print. Allows you to format variables.

Float and int are data types. Float gives you a fixed decimal while int is a whole number.

Week 5 (Chapter 3)

“If” and “Else” are conditional statements

Indentation is important and so is using a :

Boolean expressions: ask a question and produce a Yes or No result

<Less than <= Less than or equal to ==equal to != not equal

Tabs and spaces may or may not be equivalent

Drawing boxes around code helps to keep organized

Elif is another conditional statement>

If blank:

print(blank)

Elif blank:

print(blank)

Else blank:

print(blank)

Keep intervals straight in ranges or it wont work.

Week 7 (Chapter 5)

Loops have **iteration variables** that change each time through a loop.

n=5 Have to initiate variable.

While n>0: Have to set condition

print(n) prints variable every time it goes through loop

n=n-1 iteration variable, if not it wouldn’t know what to do after entering 5

print(‘blastoff!’) only prints once loop is completed, not in indentation

print(n) will print final variable of end after loop is completed since not in indentation

LOOP THAT WILL NOT WORK

n=5

While n>0:

Print(‘Lather’)

Print(‘Rinse”)

Print(‘Dry off’)

NO ITERATION VARIABLE

#Prof said breaks was bad practice so I didn’t include notes on breaks and continues.

Definite loop

for i in (5,4,3,2,1): green is iteration variable that iterates through the sequence

print(i) the purple is the (body) of code that is executed once for each value in the sequence

print(‘Blastoff!’)

5

4

3

2

1

Blastoff!

friends=(‘Joseph’,’Glenn’,’Sally’)

for friend in friends:

print(‘Happy New Year:’,friend)

print(‘Done!’)

Happy New Year: Joseph

Happy New Year: Glenn

Happy New Year: Sally

print(‘Before’)

for thing in(9,41,12,3,74,15)

print(thing)

print(‘After’)

before

9

41

12

3

74

15

After

Notice how Before and After are not in loop

Average in Loop

Count=0

Sum=0

Print(‘Before’,count,sum)

For value in (9,41,12,3,74,15):

Count=count+1

Sum=sum+value

Print(count,suum,value)

Print(‘After’,count,sum,sum/count)

Before 00

9 9

50 41

62 12

65 3

139 74

154 15

After 154 25