Computer Science is the study of algorithms

Interpreter turns python code into what computer can understand

Escape characters

\\=\

\”=”

\n = new line

\t= tab

Print(“professor rosen said \”hello.\””)

Operations

\*\* is ^

Cannot divide by 0

// is quotient without remainder

Mod by 10 gives last digit, mod by 100 gives last 2

Python does not characters, only strings

>= , <=, ==, and,

len(word) gives length

5<x<10 is allowed

Min(a,b,c)

Max

Abs(-7)=7

Chr(97)=’a’

Ord(‘a’)=97

Loops/If statements

If xxx:

Do this

Elif xxx:

Do this

Else:

Do this

For x in range(4): //does it 4 times

Do this

“”” multiline string “””

Creating Lists

L=[1,2,3]

l.append(5)

len(l) gives length

l[0:2]=[1,2]

l=list(range(100)) //l is a list that holds 0 to 99

l[::-1]=99 to 0

l[::2]= 0 to 98 even numbers

l[0:10:3]=[0,3,6,9] //takes index 0 to 10 and gets every third index

words.count(“eggs”) //returns 10 if list contains 10 eggs

words.index(“eggs”) //finds first index of list that holds eggs

var=”hi”)

list(var)=[h,i]

var.split() does same thing

var.split(x) //takes away x and splits sections into array

Tuples

T=(“hello”,”tuple”)

Tuples cannot append

Len(T) gives length of tuple

Strings

S=”hello”

S[0]=h

S[-1]=o

S[0:3]=hel

S[0:]=hello //this goes all the way to the end

S[:4]=hell //beginning to index 4

S[0:434343]= hello

“”.join(string) //joins list

“ “.join(string) //joins with spaces

For index, color in enumerate(colors):

Bob.forward((index+1)+50)

Print(index, color) //0 red 1 blue 2 green

Sep=”//” separates with slash (xx,xx,xx)