CPE 101

01/12/18

1.9 Arithmetic Order of Operations

Follows PEMDAS

1. Parentheses
2. Exponentiation
3. Multiplication and Division
4. Addition and Subtraction

Except for = (assignment) and \*\* (exponentiation) operators are evaluated from left to right

1.10

Programmers use parenthesis to solve two problems:

Force parenthesized expressions to be evaluated before other expressions

Make long expression easier to read(later)

1.11

Most cases, code is read far more often than it is written

#calculate the mean value

Beneficiaries of comments:

Other programmers can understand your code

You might forget what your code means when you review it later

You, because you have to think about what the code does

1.12

To identify the purpose of a program and its authors add headers with comments

1.14 Assigning Variables

Python is dynamically typed:

Variables are not explicitly given a type, such as int or float

The type is determined by the value stored in the variable

1.15 Using Variables

Once assigned, a variable can be used wherever its values is syntactically correct

1.16 Function input – Dynamic input

Data can be provided to a program before it runs by included it in the code

In Python, the input function allows the user to provide data to a running program by entering information tp a prompt

2.1 Functions

A variable is a name that refers to a value.

A function is a name that refers to a sequence of statements. The sequence of statements must be defined ‘somewhere’. A function may or may not return a result

def fahrenheit\_to\_celcius(x):

celsius = 5/9 \* (x-32)

return celsius

f = 80

c = Fahrenheit\_to\_celsius(f)

print(‘Celsius’ , c)

2.4 Python Built-in Functions

Pythons has several functions that are always available 9built-in functions)

Print(string)

Input(string)

Int(x)

Float(x)

Str(x)

Type(x) #returns the data type of x

Abs(x) #returns the absolute value of x

Min(x , y) #returns the lowest value of x or y

Max(x ,y) #returns the highest value of x or y

Dir(func-name) # displays the info about a built-in function