9/4 CSP(L) notes

Overview

idk

- **QOTD 1 is due before friday 8am**
- **It is unusual, its a survey assessing experiences attitudes and perspective on generative AI**
- **Completion grade**
- **Qotd 2 will be released friday and due monday 8am**

Functions:

- Function invocation itself “stands in” for a value
- Fundamental to the notion of programming is the ability to extend the language by writing your own function
- ‘Def’ is used to initiate a function definition. ‘Def frame (parameters): <body of definition indented> —-- return(<return values if any>)
- End of function based of indentation
- Also: functions typically return values to use in future calculations.
- ‘Def frame(param1, param2, … paramN):
- Def addemup(x, y): …. return (x + y)
- Whatever arguments are given at invocation are evaluated and then passed to the function, mapping them 1:1 to the corresponding formal parameters
- >>> addemup(3, 4),,,, 7
- When u define, the formal parameter must stay same

Python prefers r and b to have same sign in // and % division

- Numeric types: **integer, floating points,** complex
- Logic types: **Boolean.**
- Sequence types**: string,** byte, bytearray, **list, tuple,** and **range**
- Mapping types**: dict.**
- Set types**: set,** frozenset
- Also: objects, functions, methods, modules, classes and others

Integer divided by floating point = floating point: mixed operations convert integers to float when floats are involved

Define function kg2lb that converts value given in kilograms to its equivalent value

- def kg2lb (w):
    - Return (w * 2.2)

- Kg2lb (1)..... 2.2
- Kg2lb (3.7) ….. 8.14

Boolean:

- True and False
- Not False… True
- False and True… False

We can ask python REPL to reveal the type of an element

>>> type(3) .. class ‘int’

>>> type(17.0) class “loat’>

type(False)... Boolean

- You can convert elements between types
- >>> int(False) … 0
- >>> bool(1)... True
- >>> float (7+ (2-3)) … 6.0
- >>> float(not False)... 1.0
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