Dylan's DCS109 Notes

Week 1

We didn't really do anything. Mostly just had an intro to the idea of programming and coding. Basic examples of time complexity and library usage. Very basic introduction. Will meet on Friday and will have some work then.

CAT sessions Thursday and Fridays with LIZ!!!!

In the case of needing to create a website that will process the year of birth when given an age of a user and the current year, what will be your inputs, outputs, and processing requirements?

Input data : Current year, current age of user and birth date
Output data : Year of birth
Processing requirements : A subtraction machine and date control access. Specifically subtracting the age from the current year. If the current month/day

What are the inputs and outputs taken when you solve for the volume of a cylinder. Given that the equation for a cylinder's volume is $V = \pi r^2 h$ what are the inputs and outputs?

Input data : radius, height of the cylinder Output data : volume Processing : value table, multiplication

Common Action Keywords in python :

Input : READ,OBTAIN,GET,INPUT
Output : PRINT,DISPLAY,SHOW,PUT
Compute : COMPUTE, CALCULATE, DETERMINE
Initialise : SET, INIT

Python lets you add floats directly to integers, holy Micky mouse.

\\= integer division, which is the same as normal division just with truncation.

Ord('x') gives the unicode for a character based on the unicode table.

def functionName() → None :
method
method
functionName()

The little $\rightarrow$ is useful because it can be used to tell a user which type of function is being used, whether it's void or int returning or whatever it could possibly be.

Use the return keyword at the end of your function in a method to return something back up the function.

Week 3

Lecture 5: For-loops

For i in range(x,y,z)

x = starting value

y = ending value

z = step size

When you increment a string by a char, the char gets appended to the end of the string.