

Week1

September 7, 2022

0.1 Week N.1 of CSCI 122

M 1:10 - 2:30 PM PHYSIC 240A

W 1:10 - 2:30 PM PHYSIC 240A

0.1.1 Important Links

Syllabus: <https://moodle.reed.edu/mod/page/view.php?id=225038> (requires login)

0.1.2 Course Structure

- Reading
- Assignments (homework assignments through GradeScope platform)
- Projects (Submitted through the moodle, around 3 this term)
- Exams (10% of grade, only)

0.1.3 Homework N.1

- Download survey.txt & fill it out
- Download test.py and run it successfully

Test.py:

```
[3]: # # # # # #  
# Test.py #  
# # # # # #  
x=int((3/2)*2) - 1  
i=1  
while i<13:  
    j=3  
    while j<30:  
        x=x+i*j  
        j=j+4  
    i=i+1  
print(x*2+1)
```

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0.1.4 Topics covered in CS 122

- Python & Course Mechanics
- Calculating
- Variables
- Functions
- Conditions
- Loops
- Recursion
- Lists & Dictionaries

Same material as 121 - but with infinite freedom for professor. Focus on writing beautiful code.

“Python is awesome except in the places it surprises you.”

A bad C++ algorithm is always worse than Python.

```
[4]: x=1 # int
      y=2 # int
      print (x+y)

      # This will output a int of 3
```

3

```
[5]: x=2.0 # float
      print (x + y)

      # Will print out 4.0 b/c x is a float so the highest specificity
```

4.0

```
[16]: x, y = 3, 2 # tuple
      print (f"A ) \nX: {x} \nY: {y}")

      # sets x and y using a tuple of (3, 2)
```

```
A )
X: 3
Y: 2
```

```
[17]: x, y = y, x # using tuples to flip x and y without weird programming stuff
      print (f"B ) \nX: {x} \nY: {y}")
```

```
B )
X: 2
Y: 3
```

```
[ ]:
```