Introduction to Python (Spring 2024)

Claudia Carroll, TRIADS

Class 2 (Jan 31st, 2024)

**Class 3 Homework Exercises**

1. Create a table showing the numbers of the lines that are executed when this program runs, and the values of the variables after each line is executed.

total = 0

for char in "tin":

total = total + 1

|  |  |  |
| --- | --- | --- |
|  | total | char |
| Line 1 | 0 | -- |
| Line 2 | 0 | t |
| Line 3 | 1 | t |
| Line 4 | 1 | t |
| Line 5 | 1 | i |
| Line 6 | 2 | i |
| Line 7 | 2 | i |
| Line 8 | 2 | n |
| Line 9 | 3 | n |

1. What does this program print?

pressure = 71.9

if pressure > 50.0:

pressure = 25.0

elif pressure <= 50.0:

pressure = 0.0

print(pressure)

*25.0*

1. Given a list of cities = ["New York”, “London”, “Paris”, “Tokyo”, “Shanghai”], write a for loop to print the number of characters in each city’s name.

*For x in cities:*

*print(len(x))*

1. Given a list of cities = ["New York”, “London”, “Paris”, “Tokyo”, “Shanghai”], and a sublist travel = [“Tokyo”, “Shanghai”], write a loop to count how elements in cities is also in travel (Hint: you will first have to create a variable to store a number)

*For x in cities:*

*for y in travel:*

*if x == y:*

*print(x)*

1. Write the code to ask what programming languages you do not know, and if the answer is Python, prints “Not anymore!”

*language = input(“What programming languages do you not know? ”)*

*if language == “python”:*

*print(“Not anymore!”)*