Introduction to Python

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Class 4

**Class 4 Homework Exercises**

1. Create a function to multiply all numbers in a list by five:

def multiply\_by\_five(numbers):

result = []

for num in numbers:

x = num \* 5

result.append(x)

return result

1. Create a function to sum all the numbers in a list:

def sum\_list(numbers):

total = 0

for num in numbers:

total += num

return total

1. Create a function to search through a list of strings and find all elements that start with the letters c or n:

def find\_c\_or\_n(words):

result = []

for word in words:

first\_letter = word[0]

if first\_letter == "c" or first\_letter == "n":

result.append(word)

return result

1. Create a function to create a text file with a certain name and write any line of text to it (hint: this function should have two *parameters*):

def write\_to\_file(filename, text):

with open(filename, "w") as f:

f.write(text)

1. Create a function to find the maximum value of any column in any CSV file (hint: this function should have two *parameters*):

import pandas as pd

def max\_in\_column(filename, column\_name):

df = pd.read\_csv(filename)

return df[column\_name].max()