**Andrew Wang**

**Homework 6**

1. **Code:**

################

# Author: Andrew Wang

# Date: 10/20/2019

# This programs allows the user to enter the total rainfall for an year into a list,

# and the program will calcaulate the average rainfall, total rainfall, and months with the

# highest and lowest rainfall

#################

#Creating two lists

rainfall = [0] \* 12

month = ['January', 'February', 'March', 'April', 'May', 'June', 'July', 'August', 'September', 'October', 'November', 'December']

#For loop that allows user to input 12 month of rainfall

for i in range(len(rainfall)):

rainfall[i] = float(input('Enter the rainfall for ' +month[i]+ ': '))

#Calculation of total and average rainfall

total\_rain = sum(rainfall)

avg\_rain = sum(rainfall) / 12

print('Total rainfall: %.2f' %total\_rain)

print('Average rainfall: %.2f' %avg\_rain)

#Finding the month of highest and lowest rainfall

high\_month = rainfall.index(max(rainfall))

low\_month = rainfall.index(min(rainfall))

print('Highest rainfall: ' +month[high\_month])

print('Lowest rainfall: ' +month[low\_month])

**Output:**

**A close up of text on a white background

Description automatically generated**

1. **Code:**

################

# Author: Andrew Wang

# Date: 10/20/2019

# This programs compares numbers inside a list and determines if it is greater than number n

# and creates a new list with numbers greater than n

#################

#Main function

def main():

number\_list = [19,2940,10,24,29,1,85,201,-15,-122,799]

num\_n = 13

comparelist(number\_list, num\_n)

#Function that compares the numbers inside the list with number n

def comparelist(number\_list, num\_n):

#Creating an empty list

larger\_list = []

#For loop that compares the number

for i in range(len(number\_list)):

if number\_list[i] > num\_n:

larger\_list.append(number\_list[i])

else:

pass

print('Number:', num\_n)

print('List of numbers:')

print(number\_list)

print('List of numbers that are larger than 13:')

print(larger\_list)

main()

**Output:**

**A screenshot of a cell phone

Description automatically generated**