GA_lab1 + lab2

February 10, 2020

1 lab1

2 Variables

```
In [3]: message = "Your weather forecast"
        print(message)

Your weather forecast
```

```
In [1]: project_title = "Weather Forecast Application"
        print (project_title)

Weather Forecast Application
```

```
In [5]: day_of_week = " for today is:"
        message_to_user = message + day_of_week
        print (message_to_user)

Your weather forecast for today is:
```

```
In [6]: todays_forecast = "Partly cloudy with a chance of thunderstorms"
        print( message_to_user + todays_forecast)

Your weather forecast for today is:Partly cloudy with a chance of thunderstorms
```

3 numbers

```
In [8]: ten_year_avg_daily_highs = 68
        total_number_of_days_of_weather_data = 87578
        #todays_range = todays_high - todays_low
```

```
In [9]: todays_high = 85
        todays_low = 69
        todays_range = todays_high - todays_low
```

```
In [10]: print(todays_range)

16


In [11]: chance_of_precipitation = 0.15

In [13]: mondays_high = 89
         tuesdays_high = 87
         wednesdays_high = 88
         thursdays_high = 92
         fridays_high =94

In [16]: avg_daily_high = (mondays_high+
         tuesdays_high+
         wednesdays_high+
         thursdays_high+
         fridays_high)/5
         print(avg_daily_high)

90.0
```

4   Mixed Practice

```
In [17]: leftover = "High of 85, low of 69, with a 15% chance of precipitation."
         print( message_to_user + leftover)
```

Your weather forecast for today is:High of 85, low of 69, with a 15% chance of precipitation.

5   lab2

```
In [39]: def user_input_validation(user_input_month,user_input_day):
             if 1 > user_input_month or user_input_month > 12:
                 valid_month = False
                 print ("please enter correct month")
             else:
                 valid_month = True
             if 1 > user_input_day or user_input_month > 31:
                 valid_day = False
                 print ("please enter correct day between 1 to 31")
             else:
                  valid_day = True
             if valid_day == True and valid_month == True:
                     return True
             else:
                     return False
```

```
In [40]: #print("OK!") if user_input_validation() else print("Not quite!")

In [41]: user_input_validation(13,25)

please enter correct month


Out[41]: False

In [42]: user_input_validation(9,31)

Out[42]: True
```

6   Weather Data

```
In [43]: recent_temperatures = [67,67,68,69,71,73,75,76,79,81,81,80,82,81,81,80,78,75,72,70,67,6

In [45]: def avg_temp(temp):
             for num in temp:
                 num += num
                 new_temp = num/len(temp)
             return new_temp


In [46]: avg_temp(recent_temperatures)

Out[46]: 5.5
```