# File: weather\_project.py  
# Name: Jolene Branch  
# Date: 8/4/2019  
# Course: DSC510 Introduction to Programming  
*"""Desc: Allows user to check weather in their town or elsewhere, and could be expanded to include future forecasts.  
Uses GET request to API https://api.openweathermap.org/data/2.5/weather"""*import json # so I can retrieve the web site's data and use json to load it so I can use it in Python  
  
import requests # allows me to provide arguments as a dictionary of strings, using the params keyword argument  
  
  
def request\_location(place\_name):  
 # the next three lines - enter values into variables that I am going to pass to myself to use later  
 url = 'https://api.openweathermap.org/data/2.5/weather'  
 querystring = {"q": place\_name, "appid": "f7a9dee7a9a79cff8b533db407326a14", "units": "imperial"} #what I want  
 headers = {'cache-control': 'no-cache'} # because weather changes, I want a fresh response each time  
  
 response = requests.request("GET", url, headers=headers, params=querystring)  
 weather\_dict = json.loads(response.text)  
  
 weather = weather\_dict.get('weather') # this 'weather' is a list, so I'll need to use an index to retrieve stuff  
 print("The weather in " + place\_name + " is " + weather[0].get('description'))  
 temp\_max = weather\_dict.get('main').get('temp\_max') # a dictionary within a dictionary  
 print("The high for today is " + str(temp\_max))  
 temp\_min = weather\_dict.get('main').get('temp\_min') # a dictionary within a dictionary  
 print("The low for today is " + str(temp\_min))  
 temp = weather\_dict.get('main').get('temp') # a dictionary within a dictionary  
 print("The current temperature is " + str(temp))  
  
  
def main():  
 print("Welcome to Jolene's U:.S. Weather Report")  
 place\_name = input('Enter the name of your city or type quit: \n')  
 place\_name = place\_name.lower() # in case user types Quit vs quit. City capitalization scrubbed by site  
 while place\_name != 'quit':  
 try:  
 request\_location(place\_name)  
 place\_name = input('Enter the name of your city or type quit: \n')  
 place\_name = place\_name.lower()  
 except:  
 print('Sorry. That location is not recognized. Please re-enter using city name only. \n')  
 place\_name = input('Enter the name of your city: \n')  
 place\_name = place\_name.lower()  
  
  
main()

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weather = weather\_dict.get('weather') *# this 'weather' is a list, so I'll need to use an index to retrieve stuff*

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temp\_max = weather\_dict.get('main').get('temp\_max') *# a dictionary within a dictionary*

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print("The low for today is " + str(temp\_min))

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print("The current temperature is " + str(temp))

**def** **main**():

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main()