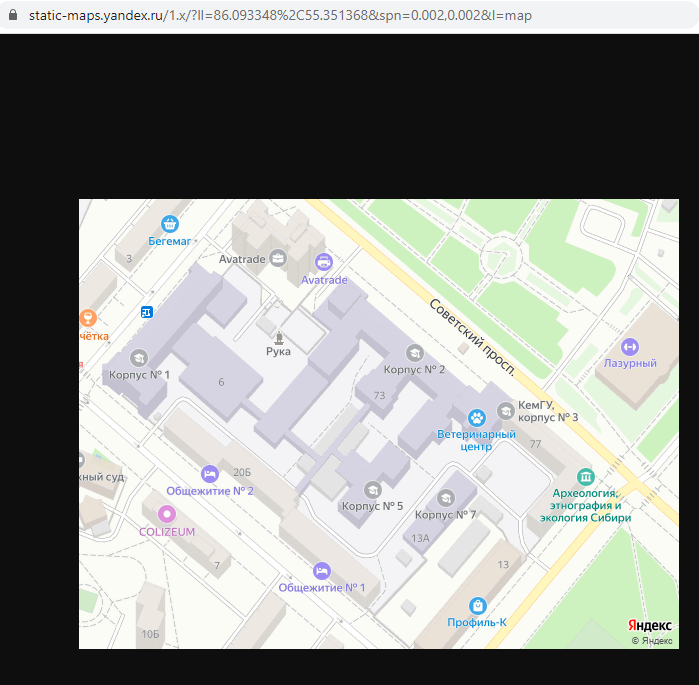
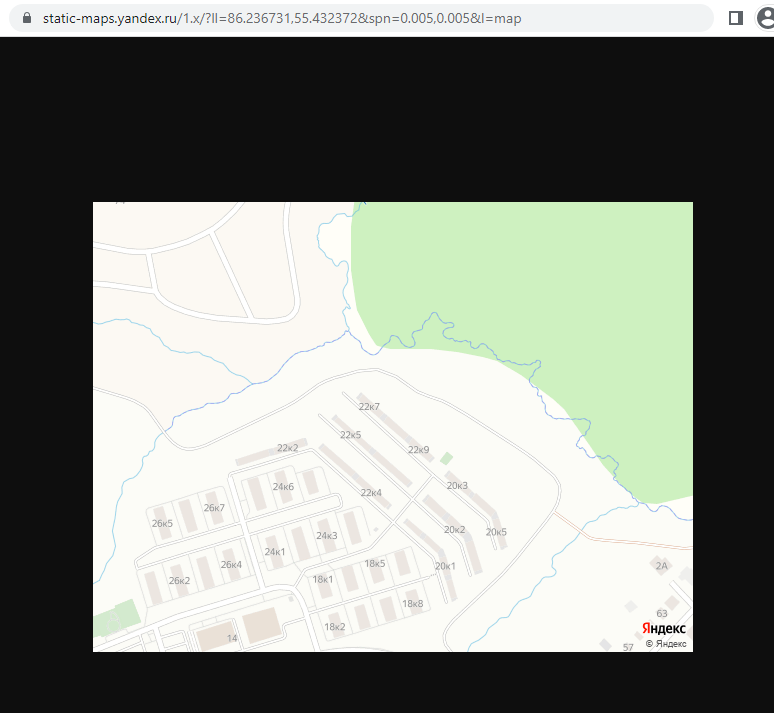
**№1**

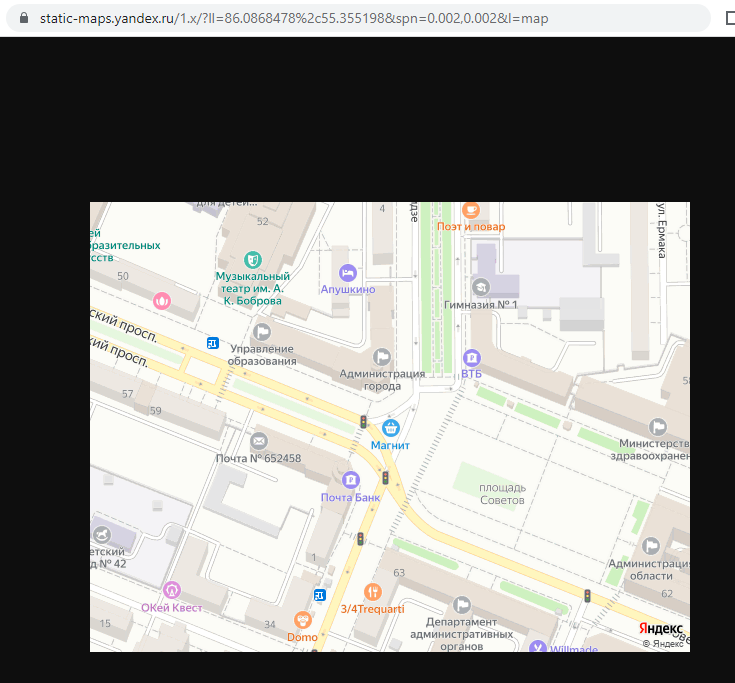
<https://static-maps.yandex.ru/1.x/?ll=86.093348%2C55.351368&spn=0.002,0.002&l=map>



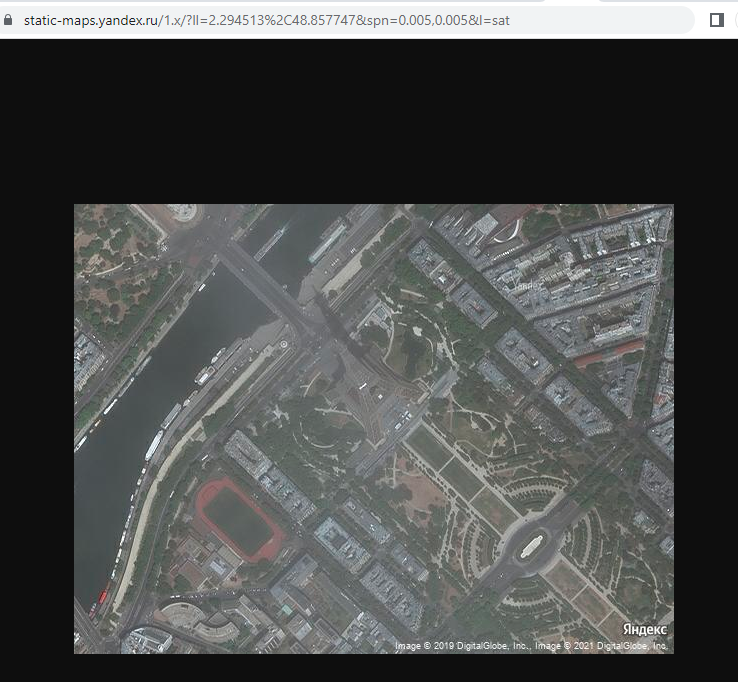
<https://static-maps.yandex.ru/1.x/?ll=86.236731,55.432372&spn=0.005,0.005&l=map>



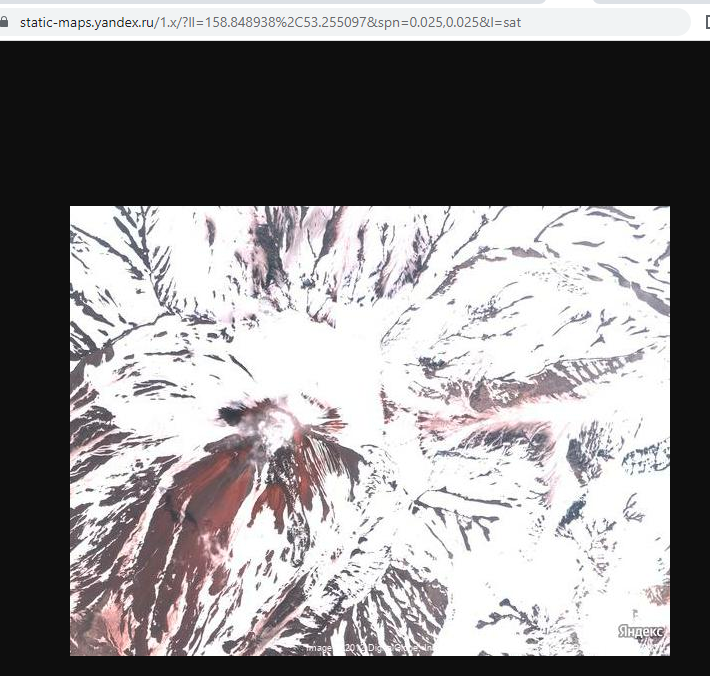
https://static-maps.yandex.ru/1.x/?ll=86.0868478%2c55.355198&spn=0.002,0.002&l=map



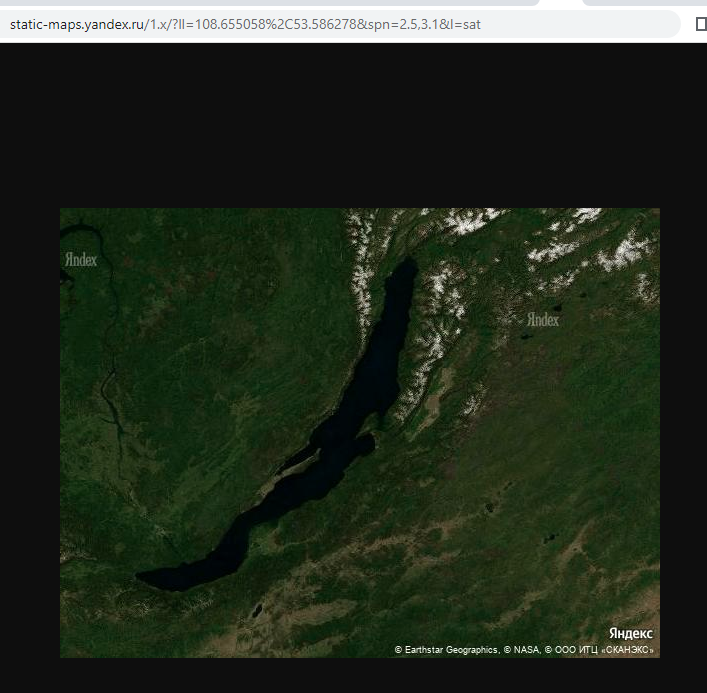
<https://static-maps.yandex.ru/1.x/?ll=2.294513%2C48.857747&spn=0.005,0.005&l=sat>



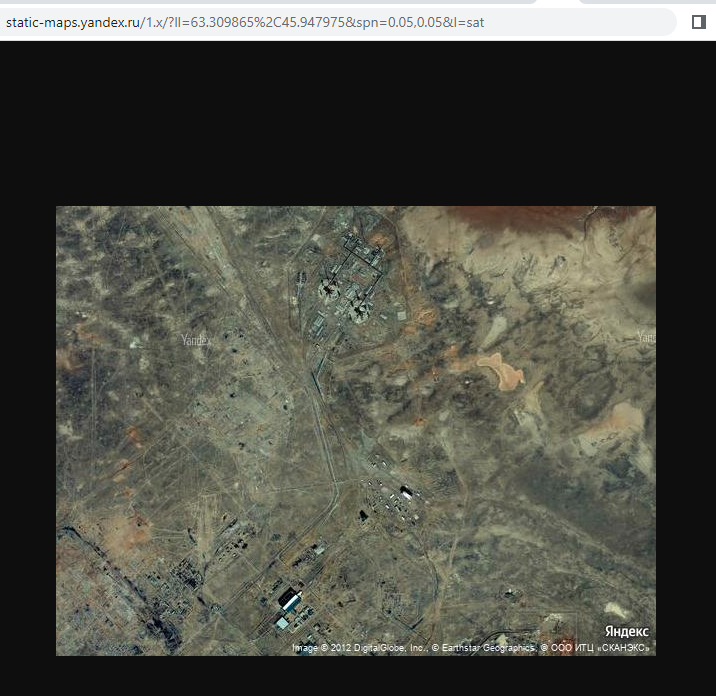
<https://static-maps.yandex.ru/1.x/?ll=158.848938%2C53.255097&spn=0.025,0.025&l=sat>



<https://static-maps.yandex.ru/1.x/?ll=108.655058%2C53.586278&spn=2.5,3.1&l=sat>



<https://static-maps.yandex.ru/1.x/?ll=63.309865%2C45.947975&spn=0.05,0.05&l=sat>



**№2**

*# A*

http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Якутск&format=json



<http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Магадан&format=json>



Якутск севернее

*# B*

<http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Кемерово&format=json>



<http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Торонто&format=json>



Торонто южнее

*# C*

<http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Хабаровск&format=json>



<http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Уфа&format=json>



<http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Нижний+Новгород&format=json>



<http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Калининград&format=json>



<http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Кемерово&format=json>



*# D*

<http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Кемерово,+ул.+Красная+6&format=json>



**№3**

import requests

response = requests.get(

"http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Москва,+Красная+площадь,+1&format=json")

json\_response = response.json()

toponym = json\_response["response"]["GeoObjectCollection"]["featureMember"][0]["GeoObject"]

toponym\_address = toponym["metaDataProperty"]["GeocoderMetaData"]["text"]

toponym\_coodrinates = toponym["Point"]["pos"]

print(toponym\_address, "имеет координаты:", toponym\_coodrinates)

****

**№4**

import requests

response = requests.get(

"http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Барнаул&format=json")

json\_response = response.json()

toponym = json\_response["response"]["GeoObjectCollection"]["featureMember"][0]["GeoObject"]

toponym\_region = toponym["metaDataProperty"]["GeocoderMetaData"]["Address"]["Components"][2]["name"]

print("Барнаул: " + toponym\_region)

response = requests.get(

"http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Мелеуз&format=json")

json\_response = response.json()

toponym = json\_response["response"]["GeoObjectCollection"]["featureMember"][0]["GeoObject"]

toponym\_region = toponym["metaDataProperty"]["GeocoderMetaData"]["Address"]["Components"][2]["name"]

print("Мелеуз: " + toponym\_region)

response = requests.get(

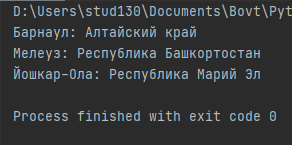
"http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Йошкар-Ола&format=json")

json\_response = response.json()

toponym = json\_response["response"]["GeoObjectCollection"]["featureMember"][0]["GeoObject"]

toponym\_region = toponym["metaDataProperty"]["GeocoderMetaData"]["Address"]["Components"][2]["name"]

print("Йошкар-Ола: " + toponym\_region)



**№5**

import requests

response = requests.get(

"http://geocode-maps.yandex.ru/1.x/?apikey=7a0332fa-0401-4a46-ac3c-da05786df316&geocode=Москва,+Петровка,+38&format=json")

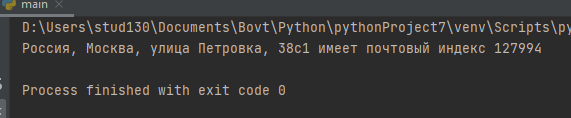
json\_response = response.json()

toponym = json\_response["response"]["GeoObjectCollection"]["featureMember"][0]["GeoObject"]

toponym\_address = toponym["metaDataProperty"]["GeocoderMetaData"]["text"]

toponym\_postal\_code = toponym["metaDataProperty"]["GeocoderMetaData"]["Address"]["postal\_code"]

print(toponym\_address + " имеет почтовый индекс " + toponym\_postal\_code)



**№6**

import requests

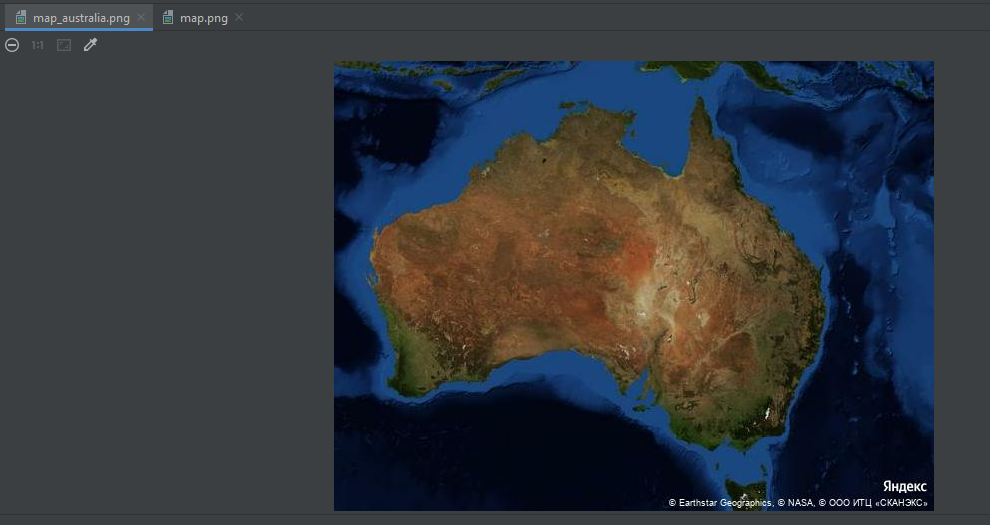
response = requests.get(

"https://static-maps.yandex.ru/1.x/?ll=136.737180%2C-26.661921&spn=18.0,18.0&l=sat")

map\_file = "map\_australia.png"

with open(map\_file, "wb") as file:

file.write(response.content)

****

**№7**

import requests

response = requests.get("https://static-maps.yandex.ru/1.x/?ll=86.098886%2C55.355069&spn=0.07,0.07&l=map&" +

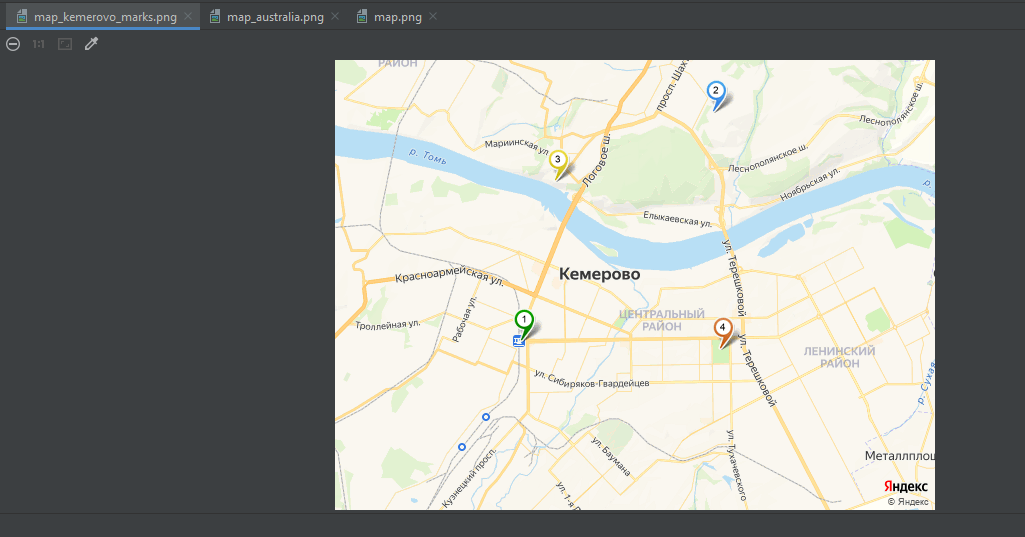
"pt=86.060110%2C55.344206,pm2dgm1~86.125956%2C55.388892,pm2lbm2~86.071900%2C55.375493," +

"pm2ywm3~86.128400%2C55.342512,pm2dom4")

map\_file = "map\_kemerovo\_marks.png"

with open(map\_file, "wb") as file:

file.write(response.content)

****

**№8**

import requests

response = requests.get("https://static-maps.yandex.ru/1.x/?ll=88.365701%2C54.605293&spn=2.5,2.9&l=map&" +

"pl=86.107338%2C55.338070,86.213270%2C55.175653,86.229957%2C55.153833,86.278425%2C54.849400," +

"86.208463%2C54.801052,86.229035%2C54.741636,86.173111%2C54.665867,86.323659%2C54.582647," +

"86.350774%2C54.539580,86.365844%2C54.494871,86.519405%2C54.233129,86.805692%2C54.056053," +

"86.902603%2C53.818733,87.140770%2C53.758963,87.186473%2C53.486263,87.128217%2C53.320871," +

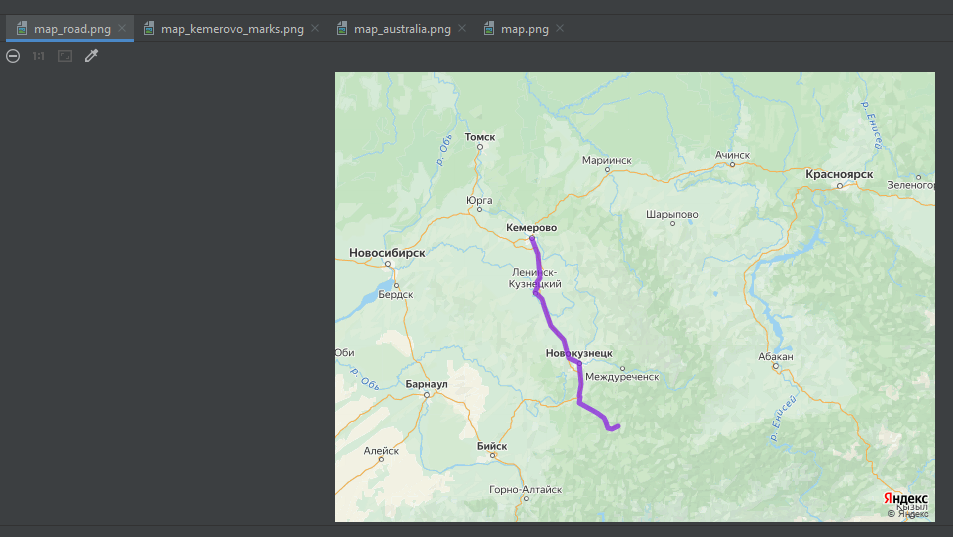
"87.148293%2C53.310017,87.129996%2C53.225853,87.524175%2C53.099552,87.673337%2C53.036962,87.736649%2C52.980124," +

"87.769463%2C52.898835,87.862995%2C52.890680,87.987732%2C52.929364")

map\_file = "map\_road.png"

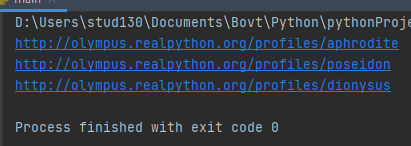
with open(map\_file, "wb") as file:

file.write(response.content)

****

**№11**

from urllib.request import urlopen  
from bs4 import BeautifulSoup  
  
r = 'http://olympus.realpython.org/profiles'  
page = urlopen(r)  
html\_text = page.read().decode('utf-8')  
soup = BeautifulSoup(html\_text, "html.parser")  
  
links = set()  
  
for link in soup.find\_all('a'):  
 l = link.get('href')  
 if l != None:  
 links.add(l)  
  
for link in links:  
 print(f'{r[:-9]}{link}')

****

**№12**

**№13**

from bs4 import BeautifulSoup

import requests

from random import choice

url = "https://quotes.toscrape.com/"

page = "page/"

count\_page = 10

quotes = []

for i in range(count\_page):

response = requests.get(url+page+str(i+1))

soup = BeautifulSoup(response.text, "html.parser")

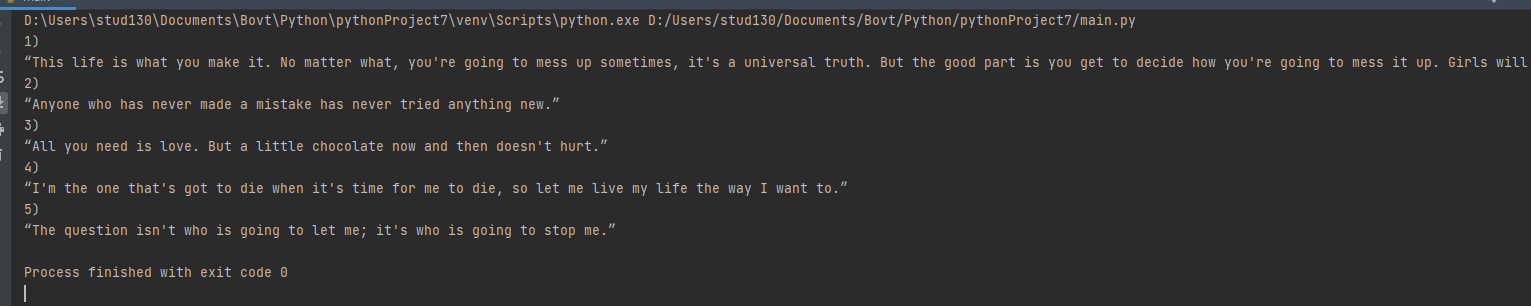
for quote in soup.find\_all("span", *class\_*="text"):

quotes.append(quote.text)

for i in range(5):

print(i+1, ")", *sep*="")

print(choice(quotes))

****