

Untitled6

October 21, 2023

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[2]: import requests
import pandas as pd
api_key = "AIzaSyApSUwJV-z9cziQSJgQg8JRUxyzrsfLoi4"
locations = [
    "1600 Amphitheatre Parkway, Mountain View, CA",
    "Statue of Liberty, New York, NY",
    "Big Ben, London, UK",
    "Eiffel Tower, Paris, France",
    "Colosseum, Rome, Italy",
    "Sydney Opera House, Sydney, Australia",
    "Machu Picchu, Peru",
    "Taj Mahal, Agra, India",
    "Great Wall of China, Beijing, China",
    "Golden Gate Bridge, San Francisco, CA",
    "Niagara Falls, Canada",
    "Christ the Redeemer, Rio de Janeiro, Brazil",
    "Petronas Twin Towers, Kuala Lumpur, Malaysia",
    "Mount Rushmore, South Dakota, USA",
    "The Acropolis, Athens, Greece",
    "Mount Everest Base Camp, Nepal",
    "Venice, Italy",
    "The Pyramids of Giza, Egypt",
    "Miyajima Island, Japan",
    "Cape Town, South Africa",
    "Santorini, Greece",
    "Chichen Itza, Mexico",
    "Grand Canyon, Arizona, USA",
    "Dubai, United Arab Emirates",
    "Victoria Falls, Zambia",
    "Banff National Park, Canada",
    "Matterhorn, Switzerland",
    "Bora Bora, French Polynesia",
    "Santorini, Greece",
    "Yellowstone National Park, USA",
    "Great Barrier Reef, Australia",
    "Santorini, Greece",
    "Antelope Canyon, Arizona, USA",
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    "Santorini, Greece",
    "The Maldives",
    "Galápagos Islands, Ecuador",
    "Victoria and Alfred Waterfront, Cape Town, South Africa",
    "Bagan, Myanmar",
    "Istanbul, Turkey",
    "Edinburgh Castle, Scotland",
    "Cappadocia, Turkey",
    "Angkor Wat, Cambodia",
    "Blue Lagoon, Iceland",
    "The Alhambra, Spain",
    "Plitvice Lakes National Park, Croatia",
    "Cinque Terre, Italy",
    "The Great Ocean Road, Australia",
    "The Amazon Rainforest"
]

location_data = []

for location in locations:
    geocoding_url = f"https://maps.googleapis.com/maps/api/geocode/json?
↳address={location}&key={api_key}"

    response = requests.get(geocoding_url)

    if response.status_code == 200:
        data = response.json()
        results = data.get("results")

        if results:
            result = results[0]
            formatted_address = result.get("formatted_address")
            latitude = result["geometry"]["location"]["lat"]
            longitude = result["geometry"]["location"]["lng"]

            location_data.append({
                "Location": location,
                "Formatted Address": formatted_address,
                "Latitude": latitude,
                "Longitude": longitude
            })
        else:

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print(f"Error geocoding location: {location}")

df = pd.DataFrame(location_data)

display(df.head(50))

df.to_csv("geocoding_data.csv", index=False)

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	Location \
0	1600 Amphitheatre Parkway, Mountain View, CA
1	Statue of Liberty, New York, NY
2	Big Ben, London, UK
3	Eiffel Tower, Paris, France
4	Colosseum, Rome, Italy
5	Sydney Opera House, Sydney, Australia
6	Machu Picchu, Peru
7	Taj Mahal, Agra, India
8	Great Wall of China, Beijing, China
9	Golden Gate Bridge, San Francisco, CA
10	Niagara Falls, Canada
11	Christ the Redeemer, Rio de Janeiro, Brazil
12	Petronas Twin Towers, Kuala Lumpur, Malaysia
13	Mount Rushmore, South Dakota, USA
14	The Acropolis, Athens, Greece
15	Mount Everest Base Camp, Nepal
16	Venice, Italy
17	The Pyramids of Giza, Egypt
18	Miyajima Island, Japan
19	Cape Town, South Africa
20	Santorini, Greece
21	Chichen Itza, Mexico
22	Grand Canyon, Arizona, USA
23	Dubai, United Arab Emirates
24	Victoria Falls, Zambia
25	Banff National Park, Canada
26	Matterhorn, Switzerland
27	Bora Bora, French Polynesia
28	Santorini, Greece
29	Yellowstone National Park, USA
30	Great Barrier Reef, Australia
31	Santorini, Greece
32	Antelope Canyon, Arizona, USA
33	Santorini, Greece
34	The Maldives
35	Galápagos Islands, Ecuador
36	Victoria and Alfred Waterfront, Cape Town, Sou...
37	Bagan, Myanmar

38 Istanbul, Turkey
 39 Edinburgh Castle, Scotland
 40 Cappadocia, Turkey
 41 Angkor Wat, Cambodia
 42 Blue Lagoon, Iceland
 43 The Alhambra, Spain
 44 Plitvice Lakes National Park, Croatia
 45 Cinque Terre, Italy
 46 The Great Ocean Road, Australia
 47 The Amazon Rainforest

	Formatted Address	Latitude	Longitude
0	Google Building 40, 1600 Amphitheatre Pkwy, Mo...	37.422388	-122.084188
1	New York, NY 10004, USA	40.689249	-74.044500
2	London SW1A 0AA, UK	51.500729	-0.124625
3	Champ de Mars, 5 Av. Anatole France, 75007 Par...	48.858370	2.294481
4	Piazza del Colosseo, 1, 00184 Roma RM, Italy	41.890210	12.492231
5	Bennelong Point, Sydney NSW 2000, Australia	-33.856784	151.215297
6	Peru	-13.226331	-72.497321
7	Dharmapuri, Forest Colony, Tajganj, Agra, Utt...	27.175145	78.042142
8	Huaiyou District, China, 101406	40.431908	116.570375
9	Golden Gate Bridge, Golden Gate Brg, San Franc...	37.819929	-122.478255
10	Niagara Falls, ON, Canada	43.089558	-79.084944
11	Parque Nacional da Tijuca - Alto da Boa Vista,...	-22.951916	-43.210487
12	Lower Ground (Concourse) Level, Menara Berkemb...	3.157469	101.711564
13	Mount Rushmore UT, SD, USA	43.949234	-103.368402
14	Athens 105 58, Greece	37.971532	23.725749
15	Everest Base Camp, Khumjung 56000, Nepal	28.002278	86.852865
16	Venice, Metropolitan City of Venice, Italy	45.440847	12.315515
17	Al Haram, Giza Governorate 3512201, Egypt	29.977296	31.132496
18	Itsukushima, Miyajimacho, Hatsukaichi, Hiroshi...	34.273211	132.305249
19	Cape Town, South Africa	-33.924869	18.424055
20	Santorini, Greece	36.393156	25.461509
21	Tinúm Municipality, 97751 Yucatan, Mexico	20.679727	-88.566708
22	Grand Canyon Village, AZ 86023, USA	36.054445	-112.140111
23	Dubai - United Arab Emirates	25.204849	55.270783
24		-17.925521	25.858534
25	Banff National Park, Improvement District No. ...	51.496846	-115.928056
26	Matterhorn	45.976574	7.658452
27	Bora Bora, French Polynesia	-16.500413	-151.741490
28	Santorini, Greece	36.393156	25.461509
29	Yellowstone National Park, United States	44.427963	-110.588455
30	Great Barrier Reef, Australia	-18.287067	147.699192
31	Santorini, Greece	36.393156	25.461509
32	Antelope Canyon, Arizona 86040, USA	36.861910	-111.374330
33	Santorini, Greece	36.393156	25.461509
34	Maldives	3.202778	73.220680
35	Galápagos Islands, Ecuador	-0.383106	-90.423334

36	Victoria & Alfred Waterfront, Cape Town, South...	-33.911798	18.422698
37	Old Bagan, Myanmar (Burma)	21.171727	94.858546
38	İstanbul, Türkiye	41.008238	28.978359
39	Castlehill, Edinburgh EH1 2NG, UK	55.948595	-3.199914
40	Cappadocia, Türkiye	38.658664	34.853160
41	Krong Siem Reap, Cambodia	13.412469	103.866986
42	Norðurljósavegur 9, 240 Grindavík, Iceland	63.880718	-22.447296
43	C. Real de la Alhambra, s/n, 18009 Granada, Spain	37.176078	-3.588141
44	Plitvice Lakes National Park, Croatia	44.865397	15.582012
45	Cinque Terre, SP, Italy	44.146094	9.643879
46	Great Ocean Rd, Victoria, Australia	-38.680444	143.391602
47	Amazon Rainforest - Codajás, State of Amazonas...	-3.465305	-62.215880

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