

Assignment 5 – Scraping

General Instructions:

The assignment can be performed in pairs or singles.

Late submission will lead to a reduction in your grade – 5 points per day.

Assignment will be written in a **Jupyter Notebook** (.IPYNB file), which will be uploaded to **GitHub**.

In the course's Moodle you should go to the assignment activity and upload a text file, named:

hw-<id>.txt, where <id> is your ID number. The file should contain the URL of your repository, for example: https://github.com/israel_israeli/DS_Intro_HW_5

You should also upload the resulting CSV file (see below).

Tasks

Attached is a file (destinations_LP_crawler_Ex5.csv) that includes a list of destinations (cities in the world): each row includes a column named "city", which describes the city name, and a column named "city_LP", which describes the relative location of the city in the LonelyPlanet website (for most cities this is the same string).

You should write a Python code that goes over the destinations in the file (better to read it into a dataframe) and for each destination, retrieves the country of that destination and the description of the city in the LonelyPlanet web site.

For example,

For Paris it goes to the url <https://www.lonelyplanet.com/france/paris>

For Rome it goes to the url <https://www.lonelyplanet.com/italy/rome>

For Rhodes it goes to the url

<https://www.lonelyplanet.com/greece/dodecanese/rhodes>

Note: you need to concatenate <https://www.lonelyplanet.com> + the country of the city + the relative location given in the column "city_LP" of the dests.csv file

To retrieve the country of the city please use Google Geolocation service.

From each page you need to **scrape** the description of the destination in that page (the text shown when you click "Read More"). For example, the output for Rome, Paris, and Rhodes should look like that:

City	Country	Description
Rome	Italy	A heady mix of haunting ruins, awe-inspiring art and vibrant street life, Italy's hot-blooded capital is one of the world's most romantic and charismatic cities. Monumental History: The result of 3000 years of ad hoc urban development, Rome's cityscape is an exhilarating sight. Ancient icons such as the Colosseum, Roman Forum and Pantheon recall the city's golden age as caput mundi (capital of the world), while monumental basilicas tell of its history as seat of the Catholic Church. Lording it over the skyline, St Peter's Basilica towers over the Vatican, testifying to the ambition of Rome's Renaissance popes and the

		<p>genius of its game-changing architects. Elsewhere, ornate piazzas and showy fountains add a baroque flourish to the city's captivating streets.</p> <p>Artistic Treasures: Few cities can rival Rome's astonishing artistic heritage. Throughout history, the city has starred in the great upheavals of Western art, drawing top artists and inspiring them to push the boundaries of creative achievement. The result is a city awash with priceless treasures. Ancient statues adorn world-class museums; Byzantine mosaics and Renaissance frescoes dazzle in art-rich churches; baroque facades flank medieval piazzas. Stroll through the centre and without even trying you'll come across masterpieces by the titans of European art – sculptures by Michelangelo, paintings by Caravaggio, frescoes by Raphael and fountains by Bernini.</p> <p>Living the Life: A trip to Rome is as much about lapping up the dolce vita lifestyle as gorging on art and culture. Idling around picturesque streets, whiling away hours at streetside cafes, people-watching on pretty piazzas – these are all central to the Roman experience. The tempo rises in the evening when fashionable drinkers descend on the city's bars and cafes for a sociable aperitivo (drink with snacks) and trattorias hum with activity. Elsewhere, cheerful hordes mill around popular haunts before heading off to hip cocktail bars and late-night clubs.</p> <p>Roman Feasting: Eating out is one of Rome's great pleasures and the combination of romantic alfresco settings and superlative food is a guarantee of good times. For contemporary fine dining and five-star wine there are any number of refined restaurants, but for a truly Roman meal head to a boisterous pizzeria or convivial neighbourhood trattoria. That's where the locals go to indulge their passion for thin, crispy pizzas, humble pasta dishes, and cool white wines from the nearby Castelli Romani hills. To finish off, what can beat a gelato followed by a shot of world-beating coffee?</p>
Paris	France	<p>Paris' monument-lined boulevards, museums, classical bistros and boutiques are enhanced by a new wave of multimedia galleries, creative wine bars, design shops and tech start-ups.</p> <p>Iconic Architecture: The cloud-piercing, wrought-iron Eiffel Tower, broad Arc de Triomphe guarding the glamorous avenue des Champs-Élysées, flying buttressed Notre Dame cathedral, lamplit bridges spanning the Seine and art nouveau cafes' wicker-chair-lined terraces are enduring Parisian emblems. Despite initial appearances, however, Paris' cityscape isn't static: there are some stunning modern and contemporary icons, too, from the inside-out, industrial-style Centre Pompidou to the mur végétal (vertical garden) gracing the Musée du Quai Branly, the glass sails of the Fondation Louis Vuitton contemporary-art centre, and the gleaming steel egg-shaped concert venue La Seine Musicale.</p> <p>Glorious Food: France's reputation for its cuisine (the French word for 'kitchen') precedes it, and whether you seek a cosy neighbourhood bistro or a triple-Michelin-starred temple to gastronomy, you'll find that every establishment prides itself on exquisite preparation and presentation of quality produce, invariably served with wine. Enticing patisseries, boulangeries (bakeries), fromageries (cheese shops) and crowded, colourful street markets are perfect for putting together a picnic to take to the city's beautiful parks and gardens. A host of culinary courses – held anywhere from home kitchens to the world's most prestigious cookery schools – offers instruction for all schedules, abilities and budgets.</p> <p>Stylish Shopping: The word 'Parisian' is synonymous with style, and fashion shopping is the city's forte. Paris remains at the forefront of international trends, and browsing emerging and established designer boutiques and flagship haute couture houses is a quintessential part of any visit. You'll also find hip concept and homewares shops, and resplendent art nouveau department stores, along with a trove of vintage shops and flea markets, atmospheric bookshops and dark-green bouquiniste stalls stocking secondhand titles along the riverbanks, adorable children's wear and toy shops, art and antique dealers, venerable establishments selling professional cookware, and, of course, gourmet-food and wine shops galore.</p> <p>Artistic Treasures: With an illustrious artistic pedigree – Renoir, Rodin, Picasso, Monet, Manet, Dalí and Van Gogh are but a few of the masters who have lived and worked here over the years – Paris is one of the world's great art repositories, harbouring treasures from antiquity onwards. In addition to big hitters like the incomparable Louvre, the Musée d'Orsay's exceptional impressionist collection, and the Centre Pompidou's cache of modern and contemporary art, scores of smaller museums showcase every imaginable genre, a diverse range of venues mount major exhibitions through to offbeat installations, and there's also the city's vibrant street art.</p>
Rhodes	Greece	<p>By far the largest and historically the most important of the Dodecanese islands, Rhodes (rodos) abounds in beaches, wooded valleys and ancient history. Whether you're here on a culture-vulture journey through past civilisations, or simply for some laidback beach time, buzzing nightlife, or diving in crystal-clear waters, it's all here. The atmospheric Old Town of Rhodes is a maze of cobbled streets that will spirit you back to the days of the Byzantine Empire and beyond. Further south, in the picture-perfect town of Lindos, capped by an ancient</p>

		Acropolis, sugar-cube houses spill down to a turquoise bay. While both Lindos and Rhodes Old Town get very crowded in summer, Rhodes is large enough to allow plenty of room to breathe that pure Aegean air.

Add the results to a DataFrame called “LP_destinations” that has three columns: city, country, and description.

Save the dataframe into a CSV file called LP_destinations.csv.

Good luck!