# TUTORIAL Basic Web Scraping Tutorial with Beautiful Soup

### Scraping Books Data from books.toscrape.com

### Step 1: Install Required Packages

```
!pip install requests beautifulsoup4 pandas
Requirement already satisfied: requests in
/usr/local/lib/python3.11/dist-packages (2.32.3)
Requirement already satisfied: beautifulsoup4 in
/usr/local/lib/python3.11/dist-packages (4.12.3)
Requirement already satisfied: pandas in
/usr/local/lib/python3.11/dist-packages (2.2.2)
Requirement already satisfied: charset-normalizer<4,>=2 in
/usr/local/lib/python3.11/dist-packages (from requests) (3.4.1)
Requirement already satisfied: idna<4,>=2.5 in
/usr/local/lib/python3.11/dist-packages (from requests) (3.10)
Requirement already satisfied: urllib3<3,>=1.21.1 in
/usr/local/lib/python3.11/dist-packages (from requests) (2.3.0)
Requirement already satisfied: certifi>=2017.4.17 in
/usr/local/lib/python3.11/dist-packages (from requests) (2024.12.14)
Requirement already satisfied: soupsieve>1.2 in
/usr/local/lib/python3.11/dist-packages (from beautifulsoup4) (2.6)
Requirement already satisfied: numpy>=1.23.2 in
/usr/local/lib/python3.11/dist-packages (from pandas) (1.26.4)
Requirement already satisfied: python-dateutil>=2.8.2 in
/usr/local/lib/python3.11/dist-packages (from pandas) (2.8.2)
Requirement already satisfied: pytz>=2020.1 in
/usr/local/lib/python3.11/dist-packages (from pandas) (2024.2)
Requirement already satisfied: tzdata>=2022.7 in
/usr/local/lib/python3.11/dist-packages (from pandas) (2025.1)
Requirement already satisfied: six>=1.5 in
/usr/local/lib/python3.11/dist-packages (from python-dateutil>=2.8.2-
>pandas) (1.17.0)
```

## Step 2: Import Libraries

```
import requests
from bs4 import BeautifulSoup
import pandas as pd

print("Libraries imported successfully!")

Libraries imported successfully!
```

### Step 3: Get the Webpage

```
# URL of the books website
url = "http://books.toscrape.com/"

# Get the webpage
response = requests.get(url)

# Check if request was successful
if response.status_code == 200:
    print("Successfully retrieved the webpage!")
    # Create BeautifulSoup object
    soup = BeautifulSoup(response.content, 'html.parser')
else:
    print(f"Failed to retrieve the webpage. Status code:
{response.status_code}")
Successfully retrieved the webpage!
```

### Step 4: Extract Book Information

```
# Find all book articles
books = soup.find_all('article', class_='product_pod')
print(f"Found {len(books)} books on the page")
# Create a list to store book data
books data = []
# Extract information from each book
for book in books:
    # Get title (in the image's alt text)
    title = book.h3.a['title']
    # Get price (in a  tag with class 'price color')
    price = book.find('p', class ='price color').text.strip()
    # Get availability (in a  tag with class 'availability')
    availability = book.find('p', class ='availability').text.strip()
    # Get rating (in the class attribute of  tag with class 'star-
rating')
    rating = book.find('p', class = 'star-rating')['class'][1]
    # Store the data
    book info = {
        'Title': title,
        'Price': price,
        'Availability': availability,
        'Rating': rating
    }
```

```
books data.append(book info)
# Create DataFrame
df = pd.DataFrame(books data)
# Display first few rows
print("\nFirst 5 books:")
display(df.head())
Found 20 books on the page
First 5 books:
{"summary":"{\n \"name\": \"display(df\",\n \"rows\": 5,\n
\"fields\": [\n {\n \"column\": \"Title\",\n \"properties\": {\n \"dtype\": \"string\",\n
\"num_unique_values\": 5,\n \"samples\": [\n \"Tipping
the Velvet\",\n \"Sapiens: A Brief History of Humankind\",\n
\"Soumission\"\n ],\n \"semantic_type\": \"\",\n
\"Price\",\n \"properties\": {\n
                                         \"dtype\": \"string\",\n
\"num unique values\": 5,\n \"samples\": [\n
u00a353.74\",\n \"\\u00a354.23\",\n
u00a350.10\"\n ],\n \"semantic_type\":
                          \"semantic type\": \"\",\n
                                      {\n \"column\":
\"description\": \"\"\n
                         }\n
                                },\n
\"Availability\",\n \"properties\": {\n \"dtype\":
\"category\",\n \"num_unique_values\": 1,\n \"samples\":
[\n
     \"In stock\"\n ],\n \"semantic type\":
\"\",\n
\"column\": \"Rating\",\n \"properties\": {\n \"dtype\": \"string\",\n \"num_unique_values\": 4,\n \"samples\":
            [\n
\"description\": \"\"\n }\n ]\n}","type":"dataframe"}
```

### Step 5: Clean the Data

```
# Clean price (remove 'f' symbol and convert to float)
df['Price'] = df['Price'].str.replace('f', '').astype(float)

# Clean availability (extract number of books)
df['Availability'] = df['Availability'].str.extract('(\d+)')

# Display cleaned data
print("Cleaned data:")
display(df.head())
Cleaned data:
{"repr_error":"Out of range float values are not JSON compliant:
nan", "type":"dataframe"}
```

### Step 6: Save to CSV File

```
# Save to CSV
df.to_csv('books_data.csv', index=False)
print("\nData saved to 'books data.csv'")
# Verify the saved data
print("\nVerifying saved data:")
saved df = pd.read csv('books data.csv')
display(saved_df.head())
Data saved to 'books_data.csv'
Verifying saved data:
{"summary":"{\n \"name\": \"display(saved_df\",\n \"rows\": 5,\n
\"fields\": [\n {\n \"column\": \"Title\",\n \"properties\": {\n \"dtype\": \"string\",\n
\"num unique_values\": 5,\n \"samples\": [\n
                                                                               \"Tipping
the Velvet\",\n \"Sapiens: A Brief History of Humankind\",\n
\"Soumission\"\n ],\n \"semantic_type\": \"\",\n
\"description\": \"\"\n }\n {\n \"column\":
\"Price\",\n \"properties\": {\n \"dtype\": \"number\",\n \"std\": 2.647672562837028,\n \"min\": 47.82,\n \"max\":
54.23,\n \"num_unique_values\": 5,\n \"samples\": [\n 53.74,\n 54.23,\n 50.1\n ],\n \"semantic_type\": \"\",\n \"description\": \"\"\n }\
n },\n {\n \"column\": \"Availability\",\n
\"properties\": {\n \"dtype\": \"number\",\n
                                                                         \"std\":
null,\n \"min\": null,\n \"max\": null,\n
\"num_unique_values\": 0,\n \"samples\": [],\n
\"semantic_type\": \"\",\n \"description\": \"\"\n
      \"samples\": [],\n \"semantic_type\": \"\",\n \"description\": \"\"\n }\n ]\n}","type"
                                  }\n ]\n]\n,"type":"dataframe"}
```

# Beginner-Friendly Web Scraping Problems [10 points each]

# Problem 1: Scrape Book Titles and Prices

**Objective**: Extract a list of book titles and their corresponding prices from Books to Scrape.

### Steps:

1. Navigate to the homepage of the website.

- 2. Identify all book titles and prices listed on the page.
- 3. Save the data into a CSV file with two columns: Title and Price.

### Problem 2: Scrape Top 10 Quotes from Quotes to Scrape

**Objective**: Extract the top 10 quotes, their authors, and the associated tags from Quotes to Scrape.

#### Steps:

- 1. Go to the homepage of the website.
- 2. Extract the text of the first 10 quotes, their authors, and the tags associated with each quote.
- 3. Save the data in a CSV file with three columns: Quote, Author, and Tags.

# Problem 3: Scrape Weather Data from World Weather Online

**Objective**: Extract the current weather conditions (temperature, weather condition, and humidity) for a given city.

#### Steps:

- 1. Visit https://www.timeanddate.com/weather/.
- 2. Search for the weather data for a city (e.g., New York).
- 3. Extract the current temperature, weather description, and humidity levels.
- 4. Save the data in a structured format (e.g., a JSON or CSV file).

```
## Problem 1
url = "http://books.toscrape.com/"
## Finding the response
response = requests.get(url)
## Checking if the response if properly fetched and if it is, getting
the html code using soup
if response.status code==200:
  print("Successfully retrieved the webpage!")
  soup = BeautifulSoup(response.content, 'html.parser')
else:
  print(f"Failed to retrieve the webpage. Status code:
{response.status code}")
Successfully retrieved the webpage!
# Find all book articles
books = soup.find all('article', class_='product_pod')
print(f"Found {len(books)} books on the page")
```

```
# Create a list to store book data
books data = []
# Extract information from each book
for book in books:
          # Get title (in the image's alt text)
          title = book.h3.a['title']
          # Get price (in a  tag with class 'price color')
          price = book.find('p', class ='price color').text.strip()
          # Store the data
          book info = {
                     'Title': title,
                      'Price': price,
          }
          books_data.append(book_info)
# Create DataFrame
df = pd.DataFrame(books data)
# Display first few rows
print("\nFirst 5 books:")
display(df.head())
Found 20 books on the page
First 5 books:
{"summary":"{\n \"name\": \"display(df\",\n \"rows\": 5,\n
\"fields\": [\n {\n \"column\": \"Title\",\n
\"properties\": {\n \"dtype\": \"string\",\n
\"num_unique_values\": 5,\n \"samples\": [\n \"Tipping
the Velvet\",\n \"Sapiens: A Brief History of Humankind\",\n
\"Soumission\"\n \"semantic_type\": \"\",\n
\"Price\",\n \"properties\": {\n \"dtype\": \"string\",\n
\"num_unique_values\": 5,\n \"samples\": [\n
u00a353.74\",\n \"\\u00a354.23\",\n \"\\
u00a350.10\"\n ],\n \"semantic_type\": \"\",\n
\cline{A} \cli
## Cleaning the data
df['Price'] = df['Price'].str.replace('f', '').astype(float)
print("Cleaned Data:")
df.head()
Cleaned Data:
```

```
{\n \"column\": \"Title\",\n \"properties\": {\n
\"dtype\": \"string\",\n \"num_unique_values\": 20,\n
                       \"A Light in the Attic\",\n
\"samples\": [\n
\"Mesaerion: The Best Science Fiction Stories 1800-1849\",\n
\"Our Band Could Be Your Life: Scenes from the American Indie
Underground, 1981-1991\"\n
                              ],\n \"semantic type\":
\"\",\n
            \"description\": \"\"\n
                                        }\n
                                              },\n {\n
\"column\": \"Price\",\n \"properties\": {\n
                                                    \"dtype\":
\"number\",\n \"std\": 15.135230520039556,\n
                                                    \"min\":
             \"max\": 57.25,\n \"num_unique_values\": 20,\n
13.99,\n
\"samples\": [\n 51.77,\n 37.59,\n 57.25\n ],\n \"semantic_type\": \"\",\n \"description\": \"\"\n
# Save to CSV
df.to csv('books data 1.csv', index=False)
print("\nData saved to 'books data 1.csv'")
# Verify the saved data
print("\nVerifying saved data:")
saved df = pd.read csv('books data 1.csv')
display(saved df.head())
Data saved to 'books_data_1.csv'
Verifying saved data:
{"summary":"{\n \"name\": \"display(saved_df\",\n \"rows\": 5,\n
\fields: [\n \"column\": \"\overline{T}itle\",\n
\"properties\": {\n \"dtype\": \"string\",\n
\"num unique values\": 5,\n
                               \"samples\": [\n
                                                       \"Tipping
the Velvet\",\n \"Sapiens: A Brief History of Humankir
\"Soumission\"\n \"semantic_type\": \"\",\n
                     \"Sapiens: A Brief History of Humankind\",\n
                        n  }\n }\n {\n \"column\":
\"description\": \"\"\n
\"Price\",\n \"properties\": {\n \"dtype\": \"number\",\n
\"std\": 2.647672562837028,\n \"min\": 47.82,\n \"max\":
54.23,\n \"num_unique_values\": 5,\n \"samples\": [\n 53.74,\n 54.23,\n 50.1\n ],\n
\"semantic_type\": \"\",\n
                              \"description\": \"\"\n
    }\n ]\n}","type":"dataframe"}
## Problem 2
url2 = "https://quotes.toscrape.com/"
## Finding the response
response = requests.get(url2)
## Checking the status code of the response
if response.status code==200:
 print("Successfully retrieved the webpage!")
```

```
else:
  print(f"Failed to retrieve the webpage. Status code:
{response.status code}")
Successfully retrieved the webpage!
## Checking the content type for the response so that we can find
appropriate way of parsing the data
contentType = response.headers.get("Content-Type")
contentType
{"type": "string"}
## Since the content-type is text/html, we cannot use the ison parser
to extract the data out of the response and therefore we have to
scrape the data out of the text of response
response.content
b'<!DOCTYPE html>\n<html lang="en">\n<head>\n\t<meta charset="UTF-8">\
n\t<title>Quotes to Scrape</title>\n
                                       <link rel="stylesheet"</pre>
href="/static/bootstrap.min.css">\n
                                       <link rel="stylesheet"</pre>
href="/static/main.css">\n
                                    \n</head>\n<body>\n
                              \n
class="container">\n
                           <div class="row header-box">\n
<div class="col-md-8">\n
                                        <h1>\n
                                                                  <a
href="/" style="text-decoration: none">Quotes to Scrape</a>\n
                   </div>\n
                                       <div class="col-md-4">\n
</h1>\n
\n
                     \n
                                           <a href="/login">Login</a>\
                                                     </div>\n
                 n
                                   \n
           </div>\n
<div class="quote" itemscope</pre>
itemtype="http://schema.org/CreativeWork">\n
                                                    <span class="text"</pre>
itemprop="text">\xe2\x80\x9cThe world as we have created it is a
process of our thinking. It cannot be changed without changing our
                                      <span>by <small class="author"</pre>
thinking.\xe2\x80\x9d</span>\n
itemprop="author">Albert Einstein</small>\n
href="/author/Albert-Einstein">(about)</a>\n
                                                    </span>\n
<div class="tags">\n
                                Tags:\n
                                                   <meta
class="keywords" itemprop="keywords" content="change, deep-
thoughts, thinking, world" /
                             > \n
                                                            <a
class="tag" href="/tag/change/page/1/">change</a>\n
<a class="tag" href="/tag/deep-thoughts/page/1/">deep-thoughts</a>\n
\n
             <a class="tag"
href="/tag/thinking/page/1/">thinking</a>\n
                                                       \n
<a class="tag" href="/tag/world/page/1/">world</a>\n
                                                                \n
                         <div class="quote" itemscope</pre>
</div>\n
            </div>\n\n
itemtype="http://schema.org/CreativeWork">\n
                                                    <span class="text"</pre>
itemprop="text">\xe2\x80\x9cIt is our choices, Harry, that show what
we truly are, far more than our abilities.\xe2\x80\x9d</span>\n
<span>by <small class="author" itemprop="author">J.K. Rowling</small>\
```

```
<a href="/author/J-K-Rowling">(about)</a>\n
                                                             </span>\n
<div class="tags">\n
                                Tags:\n
                                                    <meta
class="keywords" itemprop="keywords" content="abilities,choices" /
                              <a class="tag"
href="/tag/abilities/page/1/">abilities</a>\n
                                                          \n
<a class="tag" href="/tag/choices/page/1/">choices</a>\n
            </div>\n\n
                          <div class="quote" itemscope</pre>
itemtype="http://schema.org/CreativeWork">\n
                                                     <span class="text"</pre>
itemprop="text">\xe2\x80\x9cThere are only two ways to live your life.
One is as though nothing is a miracle. The other is as though
everything is a miracle.\xe2\x80\x9d</span>\n
                                                      <span>by <small</pre>
class="author" itemprop="author">Albert Einstein</small>\n
href="/author/Albert-Einstein">(about)</a>\n
                                                     </span>\n
<div class="tags">\n
                                Tags:\n
                                                    <meta
class="keywords" itemprop="keywords"
content="inspirational,life,live,miracle,miracles" / > \n
              <a class="tag"
href="/tag/inspirational/page/1/">inspirational</a>\n
                                                                  \n
<a class="tag" href="/tag/life/page/1/">life</a>\n
                                                               \n
<a class="tag" href="/tag/live/page/1/">live</a>\n
                                                               \n
<a class="tag" href="/tag/miracle/page/1/">miracle</a>\n
<a class="tag" href="/tag/miracles/page/1/">miracles</a>\
             \n
                       </div>\n
                                    </div>\n\n
                                                  <div class="quote"
n
itemscope itemtype="http://schema.org/CreativeWork">\n
class="text" itemprop="text">\xe2\x80\x9cThe person, be it gentleman
or lady, who has not pleasure in a good novel, must be intolerably
stupid.\xe2\x80\x9d</span>\n
                                     <span>by <small class="author"</pre>
itemprop="author">Jane Austen/n
                                                <a href="/author/Jane-
Austen">(about)</a>\n
                             </span>\n
                                               <div class="tags">\n
                   <meta class="keywords" itemprop="keywords"</pre>
Tags:\n
content="aliteracy,books,classic,humor" /
                                                              \n
<a class="tag" href="/tag/aliteracy/page/1/">aliteracy</a>\n
              <a class="tag" href="/tag/books/page/1/">books</a>\n
\n
              <a class="tag" href="/tag/classic/page/1/">classic</a>\n
\n
              <a class="tag" href="/tag/humor/page/1/">humor</a>\n
\n
                                     <div class="quote" itemscope</pre>
\n
          </div>\n
                      </div>\n\n
itemtype="http://schema.org/CreativeWork">\n
                                                     <span class="text"</pre>
itemprop="text">\xe2\x80\x9cImperfection is beauty, madness is genius
and it's better to be absolutely ridiculous than absolutely
boring.\xe2\x80\x9d</span>\n
                                    <span>by <small class="author"</pre>
itemprop="author">Marilyn Monroe</small>\n
href="/author/Marilyn-Monroe">(about)</a>\n
                                                    </span>\n
<div class="tags">\n
                                Tags:\n
                                                    <meta
class="keywords" itemprop="keywords" content="be-
vourself,inspirational" /
                             > \n
class="tag" href="/tag/be-yourself/page/1/">be-yourself</a>\n
              <a class="tag"
href="/tag/inspirational/page/1/">inspirational</a>\n
                                                                  \n
</div>\n </div>\n\n <div class="quote" itemscope
```

```
itemtype="http://schema.org/CreativeWork">\n
                                                    <span class="text"</pre>
itemprop="text">\xe2\x80\x9cTry not to become a man of success. Rather
become a man of value.\xe2\x80\x9d</span>\n
                                                    <span>by <small</pre>
class="author" itemprop="author">Albert Einstein</small>\n
                                                                   <a
href="/author/Albert-Einstein">(about)</a>\n
                                                    </span>\n
<div class="tags">\n
                                Tags:\n
                                                    <meta
class="keywords" itemprop="keywords" content="adulthood, success, value"
                                   <a class="tag"
     > \n
                     \n
href="/tag/adulthood/page/1/">adulthood</a>\n
                                                          \n
<a class="tag" href="/tag/success/page/1/">success</a>\n
                                                                     \n
<a class="tag" href="/tag/value/page/1/">value</a>\n
                                                                 \n
                          <div class="quote" itemscope</pre>
            </div>\n\n
itemtype="http://schema.org/CreativeWork">\n
                                                    <span class="text"</pre>
itemprop="text">\xe2\x80\x9cIt is better to be hated for what you are
than to be loved for what you are not.\xe2\x80\x9d</span>\n
<span>by <small class="author" itemprop="author">Andr\xc3\xa9
Gide</small>\n
                      <a href="/author/Andre-Gide">(about)</a>\n
                 <div class="tags">\n
</span>\n
                                                 Tags:\n
<meta class="keywords" itemprop="keywords" content="life,love" /</pre>
                              <a class="tag"
href="/tag/life/page/1/">life</a>\n
                                                \n
                                                              <a
class="tag" href="/tag/love/page/1/">love</a>\n
                                                            n
                          <div class="quote" itemscope</pre>
</div>\n
            </div>\n\n
itemtype="http://schema.org/CreativeWork">\n
                                                    <span class="text"</pre>
itemprop="text">\xe2\x80\x9cI have not failed. I've just found
10,000 ways that won't work.\xe2\x80\x9d</span>\n
                                                              <span>bv
<small class="author" itemprop="author">Thomas A. Edison/small>\n
<a href="/author/Thomas-A-Edison">(about)</a>\n
                                                        </span>\n
<div class="tags">\n
                                Tags:\n
                                                   <meta
class="keywords" itemprop="keywords"
content="edison,failure,inspirational,paraphrased" / > \n
              <a class="tag" href="/tag/edison/page/1/">edison</a>\n
\n
              <a class="tag" href="/tag/failure/page/1/">failure</a>\n
\n
              <a class="tag"
href="/tag/inspirational/page/1/">inspirational</a>\n
                                                                  \n
<a class="tag" href="/tag/paraphrased/page/1/">paraphrased</a>\n
                      </div>\n\n
                                    <div class="quote" itemscope</pre>
          </div>\n
itemtype="http://schema.org/CreativeWork">\n
                                                    <span class="text"</pre>
itemprop="text">\xe2\x80\x9cA woman is like a tea bag; you never know
how strong it is until it's in hot water.\xe2\x80\x9d</span>\n
<span>by <small class="author" itemprop="author">Eleanor
Roosevelt</small>\n
                           <a href="/author/Eleanor-
Roosevelt">(about)</a>\n
                                </span>\n
                                                 <div class="tags">\n
                   <meta class="keywords" itemprop="keywords"</pre>
Tags:\n
content="misattributed-eleanor-roosevelt" / > \n
<a class="tag"
href="/tag/misattributed-eleanor-roosevelt/page/1/">misattributed-
eleanor-roosevelt</a>\n
                           \n </div>

<div class="quote" itemscope</pre>
```

```
itemtype="http://schema.org/CreativeWork">\n
                                                   <span class="text"</pre>
itemprop="text">\xe2\x80\x9cA day without sunshine is like, you know,
night.\xe2\x80\x9d</span>\n
                                  <span>by <small class="author"</pre>
itemprop="author">Steve Martin</small>\n
                                               <a
href="/author/Steve-Martin">(about)</a>\n
                                                </span>\n
                                                                 <div
class="tags">\n
                                             <meta class="keywords"</pre>
                          Tags:\n
itemprop="keywords" content="humor,obvious,simile" /
             <a class="tag" href="/tag/humor/page/1/">humor</a>\n
\n
             <a class="tag" href="/tag/obvious/page/1/">obvious</a>\n
n
\n
             <a class="tag" href="/tag/simile/page/1/">simile</a>\n
         </div>\n
                     </div>\n\n
                                   <nav>\n
                                                  \
\n
n
            \n
                          \n
                                        class="next">\n
<a href="/page/2/">Next <span aria-hidden="true">&rarr;</span></a>\n
                            \n
                                       </nav>\n
                                                               <div
\n
                                                   </div>\n
class="col-md-4 tags-box">\n
                                                 <h2>Top Ten
                                   \n
                                    <span class="tag-item">\n
tags</h2>\n
                      \n
<a class="tag" style="font-size: 28px" href="/tag/love/">love</a>\n
</span>\n
                    n
                                  <span class="tag-item">\n
<a class="tag" style="font-size: 26px"
href="/tag/inspirational/">inspirational</a>\n
                                                         </span>\n
             <span class="tag-item">\n
                                                  <a class="tag"
style="font-size: 26px" href="/tag/life/">life</a>\n
                                  <span class="tag-item">\n
</span>\n
                    \n
<a class="tag" style="font-size: 24px" href="/tag/humor/">humor</a>\n
</span>\n
                                  <span class="tag-item">\n
                    \n
<a class="tag" style="font-size: 22px" href="/tag/books/">books</a>\n
                                  <span class="tag-item">\n
</span>\n
<a class="tag" style="font-size: 14px"</pre>
href="/tag/reading/">reading</a>\n
                                             </span>\n
<span class="tag-item">\n
                                    <a class="tag" style="font-size:</pre>
10px" href="/tag/friendship/">friendship</a>\n
                                                         </span>\n
             <span class="tag-item">\n
                                                  <a class="tag"
style="font-size: 8px" href="/tag/friends/">friends</a>\n
                                  <span class="tag-item">\n
</span>\n
                    \n
<a class="tag" style="font-size: 8px" href="/tag/truth/">truth</a>\n
                                  <span class="tag-item">\n
</span>\n
                    \n
<a class="tag" style="font-size: 6px" href="/tag/simile/">simile</a>\n
</span>\n
                           \n
                                    </div>\n</div>\n\n
                    \n
<footer class="footer">\n
                                <div class="container">\n
\n
                                       Quotes by: <a
href="https://www.goodreads.com/quotes">GoodReads.com</a>\n
                 \n
                                                        Made with
<span class=\'zyte\'>\xe2\x9d\xa4</span> by <a class=\'zyte\'
href="https://www.zyte.com">Zyte</a>\n
                                                 \n
</div>\n </footer>\n</body>\n</html>'
## Finding the html code
soup = BeautifulSoup(response.content, "html.parser")
```

```
## Finding all the elements which are div and has the "quote" class
quotes= soup.find all("div",class ="quote")
## Finding the first 10 such elements
req quotes = quotes[:10]
rea quotes
[<div class="guote" itemscope=""</pre>
itemtype="http://schema.org/CreativeWork">
<span class="text" itemprop="text">"The world as we have created it
is a process of our thinking. It cannot be changed without changing
our thinking."</span>
<span>by <small class="author" itemprop="author">Albert
Einstein</small>
 <a href="/author/Albert-Einstein">(about)</a>
</span>
<div class="tags">
             Tags:
             <meta class="keywords" content="change,deep-</pre>
thoughts, thinking, world "itemprop="keywords"/>
 <a class="tag" href="/tag/change/page/1/">change</a>
<a class="tag" href="/tag/deep-thoughts/page/1/">deep-thoughts</a>
<a class="tag" href="/tag/thinking/page/1/">thinking</a>
 <a class="tag" href="/tag/world/page/1/">world</a>
</div>
</div>,
<div class="quote" itemscope=""</pre>
itemtype="http://schema.org/CreativeWork">
 <span class="text" itemprop="text">"It is our choices, Harry, that
show what we truly are, far more than our abilities."</span>
 <span>by <small class="author" itemprop="author">J.K. Rowling</small>
<a href="/author/J-K-Rowling">(about)</a>
</span>
 <div class="tags">
             <meta class="keywords" content="abilities,choices"</pre>
itemprop="keywords"/>
<a class="tag" href="/tag/abilities/page/1/">abilities</a>
<a class="tag" href="/tag/choices/page/1/">choices</a>
 </div>
</div>,
 <div class="quote" itemscope=""</pre>
itemtype="http://schema.org/CreativeWork">
 <span class="text" itemprop="text">"There are only two ways to live
your life. One is as though nothing is a miracle. The other is as
though everything is a miracle."</span>
<span>by <small class="author" itemprop="author">Albert
Einstein</small>
 <a href="/author/Albert-Einstein">(about)</a>
```

```
</span>
 <div class="tags">
             Tags:
             <meta class="keywords"</pre>
content="inspirational, life, live, miracle, miracles"
itemprop="keywords"/>
<a class="tag" href="/tag/inspirational/page/1/">inspirational</a>
<a class="tag" href="/tag/life/page/1/">life</a>
<a class="tag" href="/tag/live/page/1/">live</a>
<a class="tag" href="/tag/miracle/page/1/">miracle</a>
 <a class="tag" href="/tag/miracles/page/1/">miracles</a>
 </div>
 </div>,
<div class="guote" itemscope=""</pre>
itemtype="http://schema.org/CreativeWork">
 <span class="text" itemprop="text">"The person, be it gentleman or
lady, who has not pleasure in a good novel, must be intolerably
stupid."</span>
 <span>by <small class="author" itemprop="author">Jane Austen</small>
 <a href="/author/Jane-Austen">(about)</a>
</span>
 <div class="tags">
             Tags:
             <meta class="keywords"</pre>
content="aliteracy,books,classic,humor" itemprop="keywords"/>
 <a class="tag" href="/tag/aliteracy/page/1/">aliteracy</a>
<a class="tag" href="/tag/books/page/1/">books</a>
<a class="tag" href="/tag/classic/page/1/">classic</a>
<a class="tag" href="/tag/humor/page/1/">humor</a>
 </div>
 </div>,
 <div class="quote" itemscope=""</pre>
itemtype="http://schema.org/CreativeWork">
<span class="text" itemprop="text">"Imperfection is beauty, madness"
is genius and it's better to be absolutely ridiculous than absolutely
boring."</span>
 <span>by <small class="author" itemprop="author">Marilyn
Monroe</small>
<a href="/author/Marilyn-Monroe">(about)</a>
</span>
<div class="tags">
             Tags:
             <meta class="keywords" content="be-</pre>
yourself, inspirational "itemprop="keywords"/>
 <a class="tag" href="/tag/be-yourself/page/1/">be-yourself</a>
 <a class="tag" href="/tag/inspirational/page/1/">inspirational</a>
</div>
</div>,
 <div class="quote" itemscope=""</pre>
```

```
itemtype="http://schema.org/CreativeWork">
 <span class="text" itemprop="text">"Try not to become a man of
success. Rather become a man of value."</span>
 <span>by <small class="author" itemprop="author">Albert
Einstein</small>
 <a href="/author/Albert-Einstein">(about)</a>
<div class="tags">
             Tags:
             <meta class="keywords" content="adulthood, success, value"</pre>
itemprop="keywords"/>
 <a class="tag" href="/tag/adulthood/page/1/">adulthood</a>
 <a class="tag" href="/tag/success/page/1/">success</a>
<a class="tag" href="/tag/value/page/1/">value</a>
</div>
 </div>,
 <div class="quote" itemscope=""</pre>
itemtype="http://schema.org/CreativeWork">
 <span class="text" itemprop="text">"It is better to be hated for what
you are than to be loved for what you are not."</span>
 <span>by <small class="author" itemprop="author">André Gide</small>
 <a href="/author/Andre-Gide">(about)</a>
 </span>
 <div class="tags">
             Tags:
             <meta class="keywords" content="life,love"</pre>
itemprop="keywords"/>
 <a class="tag" href="/tag/life/page/1/">life</a>
<a class="tag" href="/tag/love/page/1/">love</a>
 </div>
 </div>,
 <div class="quote" itemscope=""</pre>
itemtype="http://schema.org/CreativeWork">
<span class="text" itemprop="text">"I have not failed. I've just
found 10,000 ways that won't work."</span>
 <span>by <small class="author" itemprop="author">Thomas A.
Edison</small>
 <a href="/author/Thomas-A-Edison">(about)</a>
</span>
<div class="tags">
             Tags:
             <meta class="keywords"</pre>
content="edison, failure, inspirational, paraphrased"
itemprop="keywords"/>
<a class="tag" href="/tag/edison/page/1/">edison</a>
<a class="tag" href="/tag/failure/page/1/">failure</a>
<a class="tag" href="/tag/inspirational/page/1/">inspirational</a>
<a class="tag" href="/tag/paraphrased/page/1/">paraphrased</a>
 </div>
```

```
</div>,
 <div class="quote" itemscope=""</pre>
itemtype="http://schema.org/CreativeWork">
 <span class="text" itemprop="text">"A woman is like a tea bag; you
never know how strong it is until it's in hot water."</span>
 <span>by <small class="author" itemprop="author">Eleanor
Roosevelt</small>
 <a href="/author/Eleanor-Roosevelt">(about)</a>
</span>
<div class="tags">
             Tags:
             <meta class="keywords" content="misattributed-eleanor-</pre>
roosevelt" itemprop="keywords"/>
<a class="tag"
href="/tag/misattributed-eleanor-roosevelt/page/1/">misattributed-
eleanor-roosevelt</a>
</div>
</div>.
<div class="quote" itemscope=""</pre>
itemtype="http://schema.org/CreativeWork">
 <span class="text" itemprop="text">"A day without sunshine is like,
you know, night."</span>
 <span>by <small class="author" itemprop="author">Steve Martin</small>
 <a href="/author/Steve-Martin">(about)</a>
 </span>
<div class="tags">
             <meta class="keywords" content="humor,obvious,simile"</pre>
itemprop="keywords"/>
<a class="tag" href="/tag/humor/page/1/">humor</a>
<a class="tag" href="/tag/obvious/page/1/">obvious</a>
<a class="tag" href="/tag/simile/page/1/">simile</a>
</div>
</div>]
## Lists for storing the guotes, authors, tags
quote text list = []
authors list = []
tags_list = []
## FInding the quotes, authors and tags out of the first 10 elements
and storing them in lists
for index, quote in enumerate(req quotes, start=1):
  ## Getting the spans which has the "text" class
  spans = quote.find_all("span",class_="text")
  ## Getting the first span because it contains the quote
  quote span = spans[0]
 ## Getting the quote as the text
  quote text = quote span.get_text(strip=True)
  ## Appending the extracted quote into the list
```

```
quote text list.append(quote text)
 ## Using the same approach for the authors
  small = quote.find("small",class ="author")
  author = small.get text(strip=True)
  authors list.append(author)
  ## Using the same sort of approach for the tags but here we are
storing the list of tags into the final list
 tags = quote.find all("a",class ="tag")
  tag list = []
  for tag in tags:
   tag list.append(tag.get_text(strip=True))
  tags list.append(tag list)
## Constructing the data
data = {
    "Quote": quote text list,
    "Author":authors list,
    "Tags":tags list
}
df=pd.DataFrame(data)
## COnverting the data into the dataframe
df.head()
{"summary":"{\n \"name\": \"df\",\n \"rows\": 10,\n \"fields\": [\n
{\n \"column\": \"Quote\",\n \"properties\": {\n
\"dtype\": \"string\",\n \"num_unique_values\": 10,\n
                        \"\\u201cA woman is like a tea bag; you
\"samples\": [\n
never know how strong it is until it's in hot water.\\u201d\",\n
\"\\u201cIt is our choices, Harry, that show what we truly are, far
more than our abilities.\\u201d\",\n
                                           \"\\u201cTry not to
become a man of success. Rather become a man of value.\\u201d\"\n
          \"semantic type\": \"\",\n \"description\": \"\"\n
],\n
      },\n {\n \"column\": \"Author\",\n \"properties\":
}\n
          \"dtype\": \"string\",\n \"num_unique_values\": 8,\n
{\n
\"samples\": [\n \"J.K. Rowling\",\n
Edison\",\n \"Albert Einstein\"\n
                                                    \"Thomas A.
\"semantic_type\": \"\",\n \"description\": \"\"\n
    \"dtype\": \"object\",\n \"semantic_type\": \"\",\n \"description\": \"\"\n }\n ]\
n}","type":"dataframe","variable_name":"df"}
df.to csv("quotes.csv",index=False)
## Storing the data into csv
df_read=pd.read_csv("quotes.csv")
##Reading the csv for rechecking
```

```
df read.head()
{"summary":"{\n \"name\": \"df_read\",\n \"rows\": 10,\n
\"fields\": [\n {\n \"column\": \"Quote\",\n
\"properties\": {\n \"dtype\": \"string\",\n
                       \"column\": \"Quote\",\n
\"num unique values\": 10,\n \"samples\": [\n
u201cA woman is like a tea bag; you never know how strong it is until
it's in hot water.\\u201d\",\n\\"\\u201cIt is our choices,
Harry, that show what we truly are, far more than our abilities.\\
u201d\",\n \"\\u201cTry not to become a man of success.
Rather become a man of value.\\u201d\"\n
                                           ],\n
\"semantic_type\": \"\",\n \"description\": \"\"\n
    \"dtype\": \"string\",\n
                                      \"num_unique_values\": 8,\n
{\n
\"samples\": [\n \"J.K. Rowling\",\n
Edison\",\n \"Albert Einstein\"\n
                                                 \"Thomas A.
                                             ],\n
\"semantic type\": \"\",\n \"description\": \"\"\n
    \"dtype\": \"string\",\n \"num_unique_values\": 10,\n
\"samples\": [\n \"['misattributed-eleanor-roosevelt']\",\n
\"['abilities', 'choices']\",\n
                                    \"['adulthood', 'success',
n}","type":"dataframe","variable name":"df read"}
## the approach of problem 3 is similar to problem 2 and therefore i
am not writing the comments again
## Problem 3
url3 = "https://www.timeanddate.com/weather/usa/new-york"
response = requests.get(url3)
if response.status code==200:
 print("Successfully retrieved the webpage!")
else:
  print(f"Failed to retrieve the webpage. Status code:
{response.status code}")
Successfully retrieved the webpage!
contentType = response.headers.get("Content-Type")
contentType
{"type": "string"}
## Since the content type is text/html, we will use web scraping to
find the data
soup = BeautifulSoup(response.content, "html.parser")
soup
```

```
<!DOCTYPE html>
<! - -
scripts and programs that download content transparent to the user are
not allowed without permission
--><html lang="en"><head><meta content="text/html; charset=utf-8"
http-equiv="Content-Type"/><title>Weather for New York, New York,
USA</title><meta content="Current weather in New York and forecast for
today, tomorrow, and next 14 days" name="description"/><meta
content="max-image-preview:large" name="robots"/><meta</pre>
content="https://www.timeanddate.com/scripts/cityog.php?title=Weather
%20in&tint=0x007b7a&city=New%20York&state=New
%20York&country=USA&image=new-york1"
property="og:image"/><meta content="1366"</pre>
property="og:image:width"/><meta content="738"</pre>
property="og:image:height"/><meta content="website"</pre>
property="og:type"/><style>
@font-face{font-family:iconfont;src:url("/common/fonts/iconfont.woff2?
v8") format("woff2"),url("/common/fonts/iconfont.woff?v8")
format("woff"),url("/common/fonts/iconfont.ttf?v8")
format("truetype"),url("/common/fonts/iconfont.svg?v8#iconfont")
format("svg");font-weight:400;font-style:normal}
</style>
<link as="font" crossorigin="" href="/common/fonts/iconfont.woff2?v8"</pre>
rel="preload" type="font/woff2"/>
<link crossorigin="" href="https://c.tadst.com" rel="preconnect"/>
<link as="style" href="//c.tadst.com/com/common/global 42.css"</pre>
rel="preload"/>
<link as="script" href="/common/prebidtad.top.desk 64.js"</pre>
rel="preload"/>
<script async=""</pre>
src="https://securepubads.g.doubleclick.net/tag/js/gpt.js"></script>
<script async=""</pre>
src="https://c.amazon-adsystem.com/aax2/apstag.js"></script>
<script async="" src="https://btloader.com/tag?</pre>
o=5174239513018368&upapi=true"></script>
<script>
AdMgr=(function(){var
isLog=0,isSent=0,slots=[],slotsR=[],techs={"pb":1,"aps":1},isResent=0,
techsR={"pb":1, "aps":1}, vals={"gdpr": "na"};
function isSecond()
{return(document.referrer||'').index0f('timeanddate')>0}
function logAds(){if(isLog){return}}
if(!window.jcb||!window.TADhba){setTimeout(logAds,1000);
return}
isLog=1;
jcb("/scripts/logads.php?d=d"+"&"+TADhba(),function(){})}
AD={s:[],o:0};
googletag=window.googletag||{};
googletag.cmd=googletag.cmd||[];
```

```
function push(f){googletag.cmd.push(f)}
function set(n,v){vals[n]=v}
function get(n){return vals[n]}
function setTargeting(n,v){if(v){push(function()}
{googletag.pubads().setTargeting(n,v)})}}
function send(){if(isSent)return;
isSent=true;
setTargeting("pbv",window.pbv);
setTargeting("si",isSecond()?"2":"1");
setTargeting("gdpr",get("gdpr"));
push(function(){googletag.enableServices();
googletag.pubads().refresh(AD.s)})}
function resend(){if(isResent)return;
isResent=true;
let o=slotsR[0];
o.S.setTargeting('rot',''+o.r);
googletag.pubads().refresh([o.S])}
function rendered(g){setTimeout(logAds,1000)}
function bidsIn(i){delete techs[i];
if(Object.keys(techs).length==0){sendAdserverRequest()}}
function bidsInR(i){delete techsR[i];
if(Object.keys(techsR).length==0){resend()}}
function addSlot(o){if (o.wm&&o.wm>window.innerWidth){o.wf.i=o.i;
o=o.wf}
o.r=0:
o.a9=function(){return{slotID:o.i,slotName:o.n,sizes:o.s}}
slots.push(o);
if(o.css){let s=document.createElement('style');
s.textContent=o.css;
document.head.append(s)}}
function refresh(o){if (o.r<3 && AdMgr.highBid){o.r++;</pre>
slotsR=[o]:
setTimeout(resend,3000);
pbjs.requestBids({timeout:2300,
adUnitCodes:[o.n],
bidsBackHandler:function()
{try{pbjs.setTargetingForGPTAsync([o.n])}catch(e){}
AdMgr.bidsInR('pb')}});
TADaps.t=+new Date();apstag.fetchBids({slots:
[o.a9()],timeout:2000,params:{adRefresh:'1'}},
function(bids){AdMgr.push(function(){TADaps.b=[];
TADaps.e=+new Date();
apstag.setDisplayBids();
AD.s.forEach(function(o){let c=0,z=o.getTargeting('amznbid');
if(z\&\&z.length>0){c=z[0]}
TADaps.b.push(c)});
AdMgr.bidsInR('aps')})}}
function slot(i){return slots[i]}
function a9slot(i){return slot(i).a9()}
function gptSlot(i){let o=slot(i),j;
```

```
if(o){o.S=googletag.defineSlot(o.n,o.s,o.i);
if(o.t){for(j=0;j<o.t.length;j++){t=o.t[j];
o.S.setTargeting(t[0],t[1])}}
o.S.addService(googletag.pubads());
AD.s.push(o.S);
if (o.ro){let e=document.getElementById(o.i);
if(e){addEventListener("impressionViewableRotate",function()
{refresh(o)}, true)}}}
function dispSlot(i){let o=slot(i);
push(function(){googletag.display(o.i)})}
push(function(){googletag.pubads().disableInitialLoad();
googletag.pubads().addEventListener('slotRenderEnded',rendered)});
return {addSlot:addSlot,
slot:slot,
a9slot:a9slot,
gptSlot:gptSlot,
dispSlot:dispSlot,
bidsIn:bidsIn,
bidsInR:bidsInR,
push: push.
setTargeting:setTargeting,
send:send,
set:set,
get:get,
rendered: rendered,
isSecond:isSecond,
done:function(){return isLog}}})();
AdMgr.addSlot({n:'/1004254/tadcom 300x600',s:[[300,600],[300,250],
[160,600],[120,600]],i:'div-gpt-com-300x600',t:
[['pf','003']],wm:1440,wf:{n:'/1004254/com 160',s:[[160,600],
[120,600]],i:'div-gpt-com-160x600',ro:1},ro:1,css:":root{--advert-sky-
size:300px}"});AdMgr.addSlot({n:'/1004254/tadcom 970',s:[[970,90],
[728,90]],i:'div-gpt-com-970x90-head',t:[['pf','005']],wm:1320,wf:
{n:'/1004254/com728',s:[[728,90]],i:'div-gpt-com-728x90-head'}});
var pbis=pbis||{};pbis.que=pbis.que||[];
pbjs.bidderSettings={standard:{storageAllowed:true}};
!function(a9,a,p){if(a[a9])return;function q(c,r)
{a[a9]. Q.push([c,r])}a[a9]={init:function()
{q("i",arguments)},fetchBids:function()
{q("f",arguments)},setDisplayBids:function()
{},targetingKeys:function(){return[]}, 0:[]}}
("apstag", window, document);
function cmpEvent(t,s){if(s){let e=t.eventStatus;
if(e=='useractioncomplete'||e=='tcloaded'){if (!t.purpose.consents[1])
{AdMgr.set('p1',1);
AdMgr.set("gdpr", "rej")} else {AdMgr.set("gdpr", "acc")}
consentDataReady();
/*
if (t.purpose.consents[4]){consentDataReady()} else
{sendAdserverRequest()}
```

```
*/}}}
function consentDataReady(){consentDataReady=function(){};
pbjs.que.push(function(){if(AdMgr.get('p1'))
{pbjs.setConfig({'deviceAccess':false})}
pbjs.addAdUnits([{code:AdMgr.slot(0).n,mediaTypes:{banner:
{sizes:AdMgr.slot(0).s}},ortb2Imp:{ext:{gpid:'/1004254/
tadcom_300x600#a3720'}},bids:[{bidder:'amx',params:
{tagId:'dGltZWFuZGRhdGUuY29t'}},{bidder:'appnexus',params:
{placementId:28369055}}, {bidder: 'criteo', params: {zoneId:1698495}},
{bidder: 'ix', params: {siteId: '911528', size: [300,600]}},
{bidder: 'medianet', params: {cid: '8CU692DPW', crid: '465741218'}},
{bidder: 'pubmatic', params: {adSlot: '4851007', publisherId: '157610'}},
{bidder:'rubicon',params:
{accountId: '16448', siteId: '127484', zoneId: '2653396'}},
{bidder: 'sharethrough', params: {pkey: 'xPWGnDqXZnqMeoflOGHfquLL'}},
{bidder:'sovrn',params:{tagid:'422106'}},{bidder:'triplelift',params:
{inventoryCode: 'TimeAndDate com 300x600'}}]},
{code:AdMgr.slot(1).n,mediaTypes:{banner:
{sizes:AdMgr.slot(1).s}},ortb2Imp:{ext:{gpid:'/1004254/
tadcom 970#a3720'}},bids:[{bidder:'amx',params:
{tagId:'dGltZWFuZGRhdGUuY29t'}},{bidder:'appnexus',params:
{placementId:28369066}}, {bidder: 'criteo', params: {zoneId:1702571}},
{bidder: 'ix', params: {siteId: '924834', size: [970,90]}},
{bidder:'medianet',params:{cid:'8CU692DPW',crid:'635764783'}},
{bidder: 'pubmatic', params: {adSlot: '4851008', publisherId: '157610'}},
{bidder:'rubicon',params:
{accountId: '16448', siteId: '127484', zoneId: '2677290'}},
{bidder: 'sharethrough', params: {pkey: 'MP4upq7RPYEkCaVYtECVCddt'}},
{bidder:'sovrn',params:{tagid:'422101'}},{bidder:'triplelift',params:
{inventoryCode: 'TimeAndDate com 728x90'}}]]);
pbjs.requestBids({bidsBackHandler:function(){var
c=0,a,b,i,h=0,r=pbjs.getBidResponses();
AdMgr.push(function(){pbjs.setTargetingForGPTAsync()});
for(a in r){if(r.has0wnProperty(a)){b=r[a].bids;
for(i=0;i<b.length;i++){if(b[i].cpm){c++;</pre>
h=Math.max(h,b[i].cpm)}}}
AdMgr.setTargeting("tadbid",""+c);
AdMgr.highBid=h;
AdMgr.bidsIn('pb')}}
TADaps.t=+new Date();apstag.fetchBids({slots:
[AdMgr.a9slot(0),AdMgr.a9slot(1)],timeout:1605,params:
{adRefresh: '0'}},
function(bids){AdMgr.push(function(){TADaps.e=+new Date();
apstag.setDisplayBids();
AD.s.forEach(function(o){let c=0,z=o.getTargeting('amznbid');
if(z\&\&z.length>0)\{c=z[0]\}
TADaps.b.push(c)});
AdMgr.bidsIn('aps')})})
pbjs.que.push(function(){pbjs.setConfig({s2sConfig:{accountId:'1',
```

```
bidders:["appnexus","pubmatic","sovrn","triplelift"],
adapter: 'prebidServer',
enabled:true,
endpoint:{plConsent:'https://www.timeanddate.com/.pbs/v1/openrtb2/
auction',
noP1Consent: https://www.timeanddate.com/.pbs/v1/openrtb2/auction'},
syncEndpoint:{plConsent:'https://www.timeanddate.com/.pbs/vl/cookie sy
nc',
noP1Consent:'https://www.timeanddate.com/.pbs/v1/cookie sync'},
timeout:978},
userSync:{userIds:[{name:"quantcastId"},{name:"criteo"},
{name:"sharedId",params:{pixelUrl:"/scripts/sharedid.php"},storage:
{name: "_sharedID", type: "cookie", expires: 30}}], filterSettings: {iframe:
{bidders: "*", filter: "include"}}},
floors:{enforcement:{enforceJS:false},data:{schema:{fields:
['size']}, values:{'300x600':0.03,'970x90':0.05}, default:0.04}},
priceGranularity:{buckets:[{min:0,max:4,increment:0.01},
{min:4,max:8,increment:0.02},{min:8,max:20,increment:0.05},
{min:20,max:30,increment:0.10},{min:30,max:50,increment:0.25},
{min:50,max:100,increment:1}]},
enableSendAllBids:true,
bidderTimeout:1305,
pageUrl: "https:\/\/www.timeanddate.com\/weather\/usa\/new-york"});
pbjs.setBidderConfig({"bidders":["rubicon"],"config":{"schain":
{"validation": "strict", "config": {"ver": "1.0", "complete": 1, "nodes":
[{"asi":"netricsales.com", "sid":"16448", "hp":1}]}}}, true);
consentDataReady()});
TADaps={b:[]};apstag.init({pubID:'12d5d789-63e3-47bc-ba31-
070e97a96f2c',adServer:'googletag'});
function sendAdserverRequest(){AdMgr.send()}
setTimeout(function(){sendAdserverRequest()},2610);
googletag.cmd.push(function()
{AdMgr.gptSlot(0);AdMgr.gptSlot(1);googletag.pubads().setTargeting('ab
 ,'b').setTargeting('hr','12').setTargeting('ut','u').setTargeting('ar
t','3720').setTargeting('pf','005').enableSingleRequest()});
</script>
<script async="" src="/common/prebidtad.top.desk 64.js"></script>
<link href="https://www.timeanddate.de/wetter/usa/new-york"</pre>
hreflang="de" rel="alternate">
<link href="https://www.timeanddate.no/vaer/usa/new-york"</pre>
hreflang="no" rel="alternate"><link href="/site.webmanifest"</pre>
rel="manifest"/><link href="//c.tadst.com/favicon-48x48.png"
rel="icon" sizes="48x48" type="image/png"/><link
href="//c.tadst.com/favicon-16x16.png" rel="icon" sizes="16x16"
type="image/png"/><link href="//c.tadst.com/favicon-32x32.png"</pre>
rel="icon" sizes="32x32" type="image/png"/><link
href="//c.tadst.com/com/common/global 42.css" rel="stylesheet"
type="text/css"/><script type="application/ld+json">
{"@context": "https://schema.org", "@type": "BreadcrumbList", "itemListEle
```

```
ment":
[{"@type":"ListItem", "position":1, "name": "Weather", "item": "https://
www.timeanddate.com/weather/"},
{"@type":"ListItem", "position":2, "name": "USA", "item": "https://
www.timeanddate.com/weather/usa"},
{"@type":"ListItem", "position": 3, "name": "New York"}]}
</script><link href="//c.tadst.com/com/common/tpl banner 22.css"</pre>
rel="stylesheet" type="text/css"/><link</pre>
href="//c.tadst.com/com/common/citypages 57.css" rel="stylesheet"
type="text/css"/><link href="//c.tadst.com/com/common/citywt 34.css"
rel="stylesheet" type="text/css"/><script>mtt=1;</script><style>
/* bug with the config button */
#set-f{height:25px; width:25px;top:-30px;}
div#qfacts {
max-height:1000000px;
}
#glook {
text-align: left;
#glook .h1 {
max-width: 80%;
tbody .wa:hover {
background: hsla(0,0%,80%,.4);
cursor:pointer;
}
</style></link></link></head><body class="tpl-banner weather"><div
class="header wrapper" id="header wrapper">
<div class="header inner" id="header inner">
<div class="banner" id="header">
<div class="fixed">
<div id="logo">
<a href="/" rel="home" title="Home page timeanddate.com"><div aria-</pre>
label="timeanddate.com" class="tad-logo" role="img"></div></a>
</div>
</div>
</div>
<div id="ad-wrap"><div class="fixed" id="ad-wrap2"><div id="ad7"><div</pre>
id="div-gpt-com-970x90-head"><script>
AdMgr.dispSlot(1);
</script>
</div></div></div>
<nav class="site-nav-bar" id="nav">
<div class="site-nav-bar inner fixed">
<button aria-label="Menu" class="site-nav-bar button site-nav-</pre>
bar button--menu" id="site-nav-menu" title="Menu">
<i class="i-font i-menu"></i></i>
</button>
<div class="site-nav-bar logo">
<a href="/" rel="home" title="Home page timeanddate.com"><img
```

```
alt="timeanddate.com" height="19" loading="lazy"
src="//c.tadst.com/gfx/n/logo/logo-2021--horizontal-inverted-
darkbg.svg" width="140"/></a>
<form action="/search/results.html" class="site-nav-bar search-form">
<input aria-label="Search" class="site-nav-bar search" id="site-nav-</pre>
search" name="query" placeholder="Search..." title="Search"/>
<button aria-label="Search" class="site-nav-bar__button site-nav-</pre>
bar button--search" id="site-nav-search-btn">
<div class="site-nav-bar search-inner">
<i class="i-font i-search"></i></i>
</div>
</button>
</form>
<div class="site-nav-bar menu-wrap">
<div class="site-nav header">
<button class="site-nav login" id="site-nav-login">Sign in
<button class="site-nav__close" id="site-nav-close" title="Close">
<i class="i-font i-close"></i>
</button>
</div>
<a class="site-nav title"</pre>
href="/news/">News</a>
nav item site-nav item--divider site-nav item--mob"><a class="site-
nav link" href="/news">News Home</a><a</pre>
class="site-nav__link" href="/news/astronomy/">Astronomy News</a>
class="site-nav item"><a class="site-nav link"</pre>
href="/news/time/">Time Zone News</a><li class="site-nav_item site-
nav item--divider"><a class="site-nav link"</pre>
href="/news/calendar/">Calendar & Holiday News</a><li class="site-
nav__item site-nav__item--divider"><a class="site-nav__link"</pre>
href="/newsletter/">Newsletter</a><a
class="site-nav link" href="/live/">Live
nav__menu"><a class="site-nav__title" href="/worldclock/">World
Clock</a><a
class="site-nav link" href="/worldclock/">Main World Clock</a><li
class="site-nav__item"><a class="site-nav link"</pre>
href="/worldclock/full.html">Extended World Clock</a><li class="site-
nav item site-nav item--divider"><a class="site-nav link"</pre>
href="/worldclock/personal.html">Personal World Clock</a><li
class="site-nav item"><a class="site-nav link"</pre>
href="/clocks/free.html">Clock for Your Site</a><li class="site-
nav item"><a class="site-nav link"</pre>
href="/worldclock/timezone/utc">UTC
nav menu"><a class="site-nav__title" href="/time/">Time Zones</a>
class="site-nav sub-menu"><li class="site-nav item site-nav item--
divider site-nav item--mob"><a class="site-nav link"
```

```
href="/time">Time Zones Home</a><a
class="site-nav link" href="/worldclock/converter.html">Time Zone
Converter</a><a class="site-nav__link"</pre>
href="/worldclock/meeting.html">Meeting Planner</a><li class="site-
nav item site-nav item--divider"><a class="site-nav link"</pre>
href="/worldclock/fixedform.html">Event Time Announcer</a><li</pre>
class="site-nav item"><a class="site-nav link"</pre>
href="/time/map/">Time Zone Map</a><li class="site-nav item site-
nav item--divider"><a class="site-nav link" href="/time/zones/">Time
Zone Abbreviations</a><a class="site-
nav link" href="/time/dst/">Daylight Saving Time</a>
nav item"><a class="site-nav link" href="/time/change/">Time Changes
Worldwide</a><a class="site-nav link"
href="/time/difference/">Time Difference</a><li class="site-
nav item"><a class="site-nav link" href="/news/time/">Time Zone
i class="site-nav menu"><a class="site-nav title"
href="/calendar/">Calendar</a><li
class="site-nav item site-nav item--divider site-nav item--mob"><a
class="site-nav__link" href="/calendar/info.html">Calendars
Home</a><a class="site-nav link"
href="/calendar/">Calendar 2025</a><a
class="site-nav link" href="/calendar/?year=2026">Calendar
2026</a><a
class="site-nav__link" href="/calendar/monthly.html">Monthly
Calendar</a><a class="site-nav link"
href="/calendar/create.html">Printable Calendar (PDF)</a><li</pre>
class="site-nav item site-nav item--divider"><a class="site-
nav link" href="/calendar/events/">Add Your Own Calendar
Events</a><a class="site-nav link"</pre>
href="/calendar/basic.html">Calendar Creator</a><li class="site-
nav__item"><a class="site-nav__link" href="/holidays/">Holidays
Worldwide</a><a class="site-nav link"
href="/on-this-day/">On This Day in History</a><li class="site-
nav item site-nav item--divider"><a class="site-nav link"</pre>
href="/holidays/fun/">Fun Holidays</a><a
class="site-nav link" href="/calendar/months/">Months of the
Year</a><a class="site-nav link"
href="/calendar/days/">Days of the Week</a><li class="site-
nav item"><a class="site-nav link" href="/date/leapyear.html">About
Leap Years</a><a class="site-nav link"</pre>
href="/news/calendar/">Calendar & Diday
nav title" href="/weather/">Weather</a><ul class="site-nav sub-
menu"><a class="site-nav__link"</pre>
href="/weather/">Worldwide</a><a
class="site-nav__link" href="/scripts/go.php">Local Weather</a>
class="site-nav item"><a class="site-nav link"</pre>
href="/scripts/go.php?type=ext">2-Week Forecast</a><li class="site-
```

```
nav item site-nav item--divider"><a class="site-nav link"</pre>
href="/scripts/go.php?type=hourly">Hour-by-Hour</a><li class="site-
nav item"><a class="site-nav link" href="/scripts/go.php?</pre>
type=historic">Past Week</a><a class="site-
nav link"
href="/scripts/go.php?type=climate">Climate</a></
nav title" href="/astronomy/">Sun, Moon & amp; Space</a>
class="site-nav sub-menu"><li class="site-nav item site-nav item--
divider site-nav item--mob"><a class="site-nav link"
href="/astronomy">Sun & Moon Home</a><a</pre>
class="site-nav link" href="/sun/">Sun Calculator</a><li class="site-
nav__item"><a class="site-nav__link" href="/moon/">Moon
Calculator</a><a
class="site-nav__link" href="/moon/phases/">Moon Phases</a><li
class="site-nav_item"><a class="site-nav_link"
href="/astronomy/night/">Night Sky</a><li class="site-nav item site-
nav__item--divider"><a class="site-nav__link" href="/astronomy/meteor-</pre>
shower/">Meteor Showers</a><a class="site-
nav link" href="/worldclock/sunearth.html">Day and Night Map</a>
class="site-nav item site-nav item--divider"><a class="site-
nav link" href="/astronomy/moon/light.html">Moon Light World
Map</a><a class="site-nav link"</pre>
href="/eclipse/">Eclipses</a>
nav item--divider"><a class="site-nav link" href="/live/">Live
Streams</a><a class="site-nav link"
href="/calendar/seasons.html">Seasons</a><a
class="site-nav link" href="/news/astronomy/">Astronomy
ul>class="site-nav menu"><a class="site-nav title"</li>
href="/counters/">Timers</a><li</pre>
class="site-nav__item site-nav__item--mob"><a class="site-nav__link"</pre>
href="/counters">Timers Home</a><a</pre>
class="site-nav__link" href="/stopwatch/">Stopwatch</a>
class="site-nav item site-nav item--divider"><a class="site-
nav link" href="/timer/">Timer</a><li class="site-nav item site-
nav item--divider"><a class="site-nav link"</pre>
href="/countdown/create">Countdown to Any Date</a><li class="site-
nav item"><a class="site-nav__link" href="/countdown/chinese">Chinese
New Year Countdown</a><a class="site-
nav link" href="/countdown/valentines">Valentine's Day
Countdown</a><a class="site-nav link"
href="/countdown/newyear">New Year Countdown</a><li class="site-
nav item"><a class="site-nav link"</pre>
href="/clocks/freecountdown.html">Countdown for Your
class="site-nav menu"><a class="site-nav title"
href="/date/">Calculators</a><li
class="site-nav item site-nav item--divider site-nav item--mob"><a
class="site-nav link" href="/date/">Calculators Home</a><li
```

```
class="site-nav__item"><a class="site-nav link"</pre>
href="/date/duration.html">Date to Date Calculator (duration)</a>
class="site-nav item"><a class="site-nav link"</pre>
href="/date/workdays.html">Business Date to Date (exclude
holidays)</a><a class="site-nav link"
href="/date/dateadd.html">Date Calculator (add / subtract)</a>
class="site-nav item site-nav item--divider"><a class="site-
nav link" href="/date/weekdayadd.html">Business Date (exclude
holidays)</a><a class="site-nav link"
href="/date/weekday.html">Weekday Calculator</a><li class="site-
nav item"><a class="site-nav link" href="/date/weeknumber.html">Week
Number Calculator</a><li class="site-nav__item site-nav__item--
divider"><a class="site-nav_link" href="/date/roman-
calculator.html">Roman Numeral Converter</a><li class="site-
nav item"><a class="site-nav link"</pre>
href="/date/birthday.html">Alternative Age Calculator</a>
class="site-nav item"><a class="site-nav link"</pre>
href="/date/pattern.html">Date Pattern Calculator</a><li class="site-
nav item"><a class="site-nav link"</pre>
href="/worldclock/distance.html">Distance
li>class="site-nav menu site-nav menu--my-account"><a
class="site-nav title" href="/custom/"><i class="i-font i-
account circle site-nav desktop-title"></i> <span>My
Account </span></a><li class="site-
nav item site-nav item--divider site-nav item--mob"><a class="site-
nav link" href="/custom">My Account</a><a</pre>
class="site-nav link" href="/custom/location.html" id="popchi">My
Location</a><a class="site-nav link"
href="/custom/site.html">My Units</a><a</pre>
class="site-nav link" href="/calendar/events/">My Events</a>
class="site-nav_item"><a class="site-nav_link"</pre>
href="/worldclock/personal.html">My World Clock</a><li class="site-
nav item site-nav item--divider"><a class="site-nav link"</pre>
href="/custom/privacy.html">My Privacy</a><li class="site-
nav item"><a class="site-nav link" href="/services/">Paid
Services</a><a class="site-nav link"
href="/custom/login.html" id="poplogin">Sign in</a><li class="site-
nav__item"><a class="site-nav__link" href="/custom/create.html"</pre>
li>
</div>
<div class="site-nav-bar blur" id="site-nav-blur"></div>
</div>
</nav>
</div>
</div><div class="po" id="po1"></div><div id="mpo"></div><div
class="alert-notice wrap" id="anw"></div><div class="main-content-</pre>
div"><script>
```

```
window.TAD=window.TAD||{};TAD.abtest='b';
</script><header class="bn-header bn-header--weather"><div class="row
socrow"><div class="fixed" id="bc"><div id="bct"><a class="fx"</pre>
href="/" target=" top">Home</a>
                                <a class="fx" href="/weather/"</pre>
target=" top">Weather</a>
                         <a class="fx" href="/weather/usa"</pre>
target=" top">USA</a>
                      New York</div></div><div class="bn-
header wrap fixed"><div class="headline-banner"><section
class="headline-banner wrap">
<img alt="Flag for USA" class="headline-banner flag" height="32"</pre>
src="//c.tadst.com/qfx/n/fl/48/us.png" title="Flag for USA"
width="48"/>
<div class="headline-banner content"><h1 class="headline-</pre>
banner__title">Weather in New York, New York,
USA</hl></div></section><section class="headline-banner extra"><form
action="/weather/" class="bn-header searchbox picker-city
noprint"><input autocomplete="off" class="picker-city input"</pre>
name="query"
onfocus="ifc(this,'ci',1,5,{"pre":"/weather/"})"
placeholder="Search for city or place..." type="search"/><button</pre>
class="picker-city button" title="Search" type="submit"><i class="i-
font i-search"></i></button></form></section></div></section</pre>
class="bn-header extra"><nav id="bk-nav"><div class="fixed"><div
class="bk-nav inner"><div class="nav-2 wrap"><li
class="nav-2 item"><a href="/worldclock/usa/new-york"
title="General/main info about New York">Time/General</a><li
class="active nav-2 item"><a href="/weather/usa/new-vork"
title="Current weather and forecast for New York">Weather <i
class="i-dropdown"></i></a><li
class="active nav-2 submenu-item"><a class="active"
href="/weather/usa/new-york" title="Shows a weather overview">Weather
Today/Tomorrow </a><a
href="/weather/usa/new-york/hourly" title="Hour-by-hour weather for
the coming week">Hour-by-Hour Forecast </a>class="nav-
2 submenu-item"><a href="/weather/usa/new-york/ext" title="Extended"</pre>
forecast for the next two weeks">14 Day Forecast </a>
class="nav-2 divider">class="nav-2 submenu-item"><a
href="/weather/usa/new-york/historic" title="Past weather for
yesterday, the last 2 weeks, or any selected month
available">Yesterday/Past Weather</a><li class="nav-2 submenu-
item"><a href="/weather/usa/new-york/climate" title="Historic weather</pre>
and climate information">Climate (Averages)</a>
class="nav-2 item"><a href="/time/zone/usa/new-york" title="Past and
future time change dates for New York">Time Zone </a>
class="nav-2 item"><a href="/time/change/usa/new-york"</pre>
title="Daylight saving time changeover dates and times for New
York">DST Changes</a><a
href="/astronomy/usa/new-york" title="Calculate rising and setting
times for the Sun and Moon in New York">Sun & amp; Moon <i class="i-
dropdown"></i></a><li class="nav-
2 submenu-item"><a href="/astronomy/usa/new-york">Sun & amp; Moon
```

```
Today </a><a href="/sun/usa/new-
vork">Sunrise & Sunset </a></a>
class="nav-2 divider"><a
href="/moon/usa/new-york">Moonrise & Amp; Moonset </a></a>
class="nav-2 submenu-item"><a href="/moon/phases/usa/new-york">Moon
Phases </a><li class="nav-
2 submenu-item"><a href="/eclipse/in/usa/new-york">Eclipses
</a><a
href="/astronomy/night/usa/new-york">Night Sky
</a></div></div></div></nav><script
type="text/javascript">
TAD=window.TAD||{};TAD.lon=-74.011;TAD.lat=40.709;
</script></section></header><main class="tpl-banner main layout-grid"
layout-grid--sky tpl-banner main--weather"><section class="layout-
grid hero tpl-banner hero"><nav class="nav-3"><div class="fixed"><a
class="active" href="/weather/usa/new-york" title="Shows a weather
overview">Weather Today</a><a href="/weather/usa/new-york/hourly"
title="Hour-by-hour weather for the coming week">Weather Hourly</a><a
href="/weather/usa/new-york/ext" title="Extended forecast for the next
two weeks">14 Day Forecast</a><a href="/weather/usa/new-york/historic"
title="Past weather for yesterday, the last 2 weeks, or any selected
month available">Yesterday/Past Weather</a><a href="/weather/usa/new-
york/climate" title="Historic weather and climate information">Climate
(Averages)</a></div></nav></section><article class="layout-grid main"
tpl-banner content"><section class="bk-focus"><div class="bk-
focus glook" id="glook"><div class="h1">Now</div><img class="mtt"</pre>
height="80" id="cur-weather" src="//c.tadst.com/gfx/w/svg/wt-1.svg"
title="Clear." width="80"/><div class="h2">0 °C</div>Clear.<br
class="clear"/>Feels Like: -3 °C<br/>><span title="High and low
forecasted temperature today">Forecast: 4 / -1 °C</span><br/>Wind: 7
km/h <span class="comp sa8" title="Wind blowing from 280° West to
East">↑</span> from West</div><div class="bk-focus info"><table
class="table table--left table--inner-borders-
rows">Location: New York City - Central
ParkCurrent Time: 27 Jan 2025,
07:24:00Latest Report: 27 Jan 2025,
06:51Visibility:
16 kmPressure: 1017
mbarHumidity: 41%Dew
Point: -12 °C</div><div class="bk-
focus map" id="bk-map"><a href="/time/map/#!cities=179"><imq
alt="Location of New York" height="160"
src="//c.tadst.com/gfx/citymap/us-10.png?10" title="Map showing the
location of New York. Click map to see the location on our worldwide
Time Zone Map." width="320"/><img alt="Location" class="fadeInDown"
height="34" id="map-mrk" src="//c.tadst.com/gfx/n/icon/icon-map-
pin.png" style="left:246px;top:29px;position:absolute" title="Location
of New York" width="18"/></a></div></section><section
class="fixed"><div class="row pdflexi-b dashb"><div><h2>Upcoming 5
```

```
hours</h2><div class="pr"><a href="/custom/site.html" id="set-f"
onclick="return modpop('/scripts/tzq.php?
cb=1330203&type=weather',null,'Change Units for Weather');"
title="Change Units"><i class="i-font i-settings"></i></a><table
class="fw sep tc" id="wt-5hr"><tr
class="h2">Now08:0009:0010:001
1:0012:004><img class="mtt" height="80"
src="//c.tadst.com/qfx/w/svq/wt-1.svg" title="Clear."
width="80"/><ing class="mtt" height="80"</pre>
src="//c.tadst.com/qfx/w/svq/wt-2.svq" title="Mostly sunny."
width="80"/><ing class="mtt" height="80"</pre>
src="//c.tadst.com/gfx/w/svg/wt-1.svg" title="Sunny."
width="80"/><id><img class="mtt" height="80"</pre>
src="//c.tadst.com/qfx/w/svq/wt-1.svq" title="Sunny."
width="80"/><ing class="mtt" height="80"
src="//c.tadst.com/gfx/w/svg/wt-1.svg" title="Sunny."
width="80"/><id><img class="mtt" height="80"</pre>
src="//c.tadst.com/gfx/w/svg/wt-1.svg" title="Sunny."
width="80"/>0 °C-
1 °C0 °C1 °C3 °C
tbody></div><a class="read-more"
href="/weather/usa/new-york/hourly">See more hour-by-hour
weather</a></div><div class="four columns">
</div></div><div class="row pdflexi"><div class="eight columns"><h2
class="mgt0">Forecast for the next 48 hours</h2><div class="tb-
scroll"><span>Scroll right to see more</span><table class="zebra tb-wt"
tc sep" id="wt-48"><thead> 
colspan="3">Monday<th class="sep-l"
colspan="4">Tuesday </span title="Morning"
means the time between 06:00 and 12:00">Morning</span><<pan
title="Afternoon means the time between 12:00 and
18:00">Afternoon</span><span title="Evening means the time"
between 18:00 and 00:00">Evening</span><span
title="Night means the time between 00:00 and
06:00">Night</span><span title="Morning means the time
between 06:00 and 12:00">Morning</span><span title="Afternoon"
means the time between 12:00 and 18:00">Afternoon</span><span
title="Evening means the time between 18:00 and
00:00">Evening</span></thead>Forecast
><imq class="mtt" height="40" src="//c.tadst.com/gfx/w/svq/wt-1.svg"</pre>
title="Sunny." width="40"/><img class="mtt" height="40"
src="//c.tadst.com/gfx/w/svg/wt-1.svg" title="Sunny."
width="40"/><ing class="mtt" height="40"
src="//c.tadst.com/gfx/w/svg/wt-13.svg" title="Clear."
width="40"/><img class="mtt" height="40"
src="//c.tadst.com/gfx/w/svg/wt-17.svg" title="0vercast."
width="40"/><id><img class="mtt" height="40"</pre>
src="//c.tadst.com/gfx/w/svg/wt-6.svg" title="Broken clouds."
width="40"/><id><img class="mtt" height="40"</pre>
```

```
src="//c.tadst.com/gfx/w/svg/wt-4.svg" title="Partly cloudy."
width="40"/><id><img class="mtt" height="40"</pre>
src="//c.tadst.com/gfx/w/svg/wt-17.svg" title="Broken clouds."
width="40"/>Temperature0 °C4 °C
td>2 °C<td class="sep-
l">1 °C1 °C2 °C-2 °C
th>Sunny.Sunny.<td
class="smaller">Clear.Overcast.<td
class="smaller">Broken clouds.Partly
cloudy.Broken clouds.Feels
Like-5 °C-1 °C-4 °C-
Speed18 km/h23 km/h25 km/h<td
class="sep-l">27 km/h28 km/h21 km/h3
km/hWind DirectionW<br/><span class="comp
sa8" title="Wind blowing from 260° West to
East">↑</span>WSW<br/>><span class="comp sa6" title="Wind
blowing from 240° West-southwest to
East-northeast">1</span>SW<br/>><span class="comp sa4"
title="Wind blowing from 220° Southwest to Northeast">></span><td
class="sep-l">WSW<br/><span class="comp sa6" title="Wind blowing from
240° West-southwest to East-northeast">+</span>WSW<br/><span
class="comp sa6" title="Wind blowing from 250° West-southwest to East-
northeast"></span>WNW<br/><span class="comp sa10"
title="Wind blowing from 300° West-northwest to
East-southeast">1</span>S<br/><span class="comp sa0"
title="Wind blowing from 180° South to
North">\uparrow</span>Humidity48%34%
td>48%<td
class="sep-l">46%50%32%41%<th
>Dew Point-10 °C-11 °C-8 °C<td
class="sep-l">-9 °C-8 °C-13 °C-14 °C</
tr>11 km13 km12 km
td><td class="sep-
l">12 km9 km12 km9 km
tr>Probability of
Precipitation0%0%0%class="sep-
class="tc" colspan="8"><span class="img-caption">* Updated Monday, 27
January 2025 02:43:02 New York time - Weather by CustomWeather, ©
2025</span></div>class="lk-block"><a</pre>
class="read-more" href="/weather/usa/new-york/ext">14 day forecast,
day-by-day</a><a class="fr read-more mgr15" href="/weather/usa/new-
york/hourly">Hour-by-hour forecast for next week</a></div><div
class="four columns"><div class="bg-b pd10 mgb25"><img class="mtt fr"
height="60" src="//c.tadst.com/gfx/w/svg/wt-13.svg" title="Clear."
width="60"/><h3 class="mqt0">Yesterday's weather</h3>Clear. 6 / -
1 °C<br/>Humidity: 44%. Wind: 11 km/h <span class="comp sa8"
title="Wind blowing from 270° West to East">↑</span> from West<p
```

```
class="tr lk-block pdr25"><a class="read-more" href="/weather/usa/new-
york/historic">More weather last week</a></div><div class="bg-b
pd10 mgb25"><h3 class="mgt0 tc">Currently at nearby stations</h3><div
class="clear"><div class="clear fr tc"><img class="mtt" height="40"
src="//c.tadst.com/qfx/w/svq/wt-14.svg" title="Passing clouds."
width="40"/><span class="block">1 °C</span></div><h3 class="mgb0">La
Guardia Airport: <span class="soft"
smaller">(13 km)</span></h3>Passing clouds.</div><div</pre>
class="clear"><div class="clear fr tc"><img class="mtt" height="40"
src="//c.tadst.com/qfx/w/svq/wt-13.svg" title="Clear."
width="40"/><span class="block">-2 °C</span></div><h3
class="mgb0">Teterboro Airport: <span class="soft</pre>
smaller">(17 km)</span></h3>Clear.</div><div class="clear"><div
class="clear fr tc"><img class="mtt" height="40"</pre>
src="//c.tadst.com/gfx/w/svg/wt-14.svg" title="Passing clouds."
width="40"/><span class="block">1 °C</span></div><h3
class="mgb0">Kennedy International Airport: <span class="soft</pre>
smaller">(21 km)</span></h3>Passing clouds.</div><p class="tr
lk-block clear pdr25"><a class="read-more" href="/weather/usa">More
weather in USA</a></div><div class="clearfix"></div></div>
</div></section><section class="pdflexi bg-sect"><div
class="fixed"><h2 class="mgt0">Forecast for the next 2 weeks</h2><div
class="tb-scroll"><span>Scroll right to see more</span><table
class="zebra tb-wt fw tc" id="wt-14d"><thead><tr class="bg-
wt">SunMonTueWedThu
th>FriSatth><thead><td
class="wna"><div class="wt-dn">26</div><a
class="read-more" href="/weather/usa/new-york/historic" title="Click"
here to see historic weather for past weeks">View historic
weather</a><td class="wa" onclick="wl('/weather/usa/new-
york/ext')"><div class="wt-dn">27</div><img class="mtt" height="60"</pre>
src="//c.tadst.com/gfx/w/svg/wt-2.svg" title="Scattered clouds."
width="60"/>4 / -1 °C<td class="wa"
onclick="wl('/weather/usa/new-york/ext')"><div</pre>
class="wt-dn">28</div><img class="mtt" height="60"
src="//c.tadst.com/qfx/w/svq/wt-6.svq" title="Mostly cloudy."
width="60"/>3 / -3 °C<td class="wa"
onclick="wl('/weather/usa/new-york/ext')"><div</pre>
class="wt-dn">29</div><img class="mtt" height="60"</pre>
src="//c.tadst.com/qfx/w/svq/wt-18.svq" title="Sprinkles late. Mostly
cloudy." width="60"/>8 / -2 °C<td class="wa"
onclick="wl('/weather/usa/new-york/ext')"><div
class="wt-dn">30</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-4.svg" title="Partly cloudy."
width="60"/>4 / -3 °C<td class="wa"
onclick="wl('/weather/usa/new-york/ext')"><div</pre>
class="wt-dn">31</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-18.svg" title="Light rain late.
Overcast." width="60"/>7 / 0 °C
```

```
onclick="wl('/weather/usa/new-york/ext')"><div</pre>
class="wt-dn">1</div><img class="mtt" height="60"</pre>
src="//c.tadst.com/gfx/w/svg/wt-28.svg" title="Rain changing to snow.
0vercast." width="60"/>4 / -2 °Cclass="wa"
onclick="wl('/weather/usa/new-york/ext')"><div</pre>
class="wt-dn">2</div><img class="mtt" height="60"</pre>
src="//c.tadst.com/qfx/w/svq/wt-4.svg" title="Increasing cloudiness."
width="60"/>3 / -4 °C<td class="wa"
onclick="wl('/weather/usa/new-york/ext')"><div
class="wt-dn">3</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-18.svg" title="Sprinkles early.
Morning clouds." width="60"/>7 / 2 °C<td class="wa"
onclick="wl('/weather/usa/new-york/ext')"><div</pre>
class="wt-dn">4</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-2.svg" title="Scattered clouds."
width="60"/>8 / 1 °C<td class="wa"
onclick="wl('/weather/usa/new-york/ext')"><div
class="wt-dn">5</div><img class="mtt" height="60"
src="//c.tadst.com/qfx/w/svq/wt-6.svq" title="Broken clouds."
width="60"/>2 / -2 °C<td class="wa"
onclick="wl('/weather/usa/new-york/ext')"><div</pre>
class="wt-dn">6</div><img class="mtt" height="60"</pre>
src="//c.tadst.com/qfx/w/svq/wt-28.svg" title="Snow changing to rain.
Overcast." width="60"/>4 / 0 °C
onclick="wl('/weather/usa/new-york/ext')"><div
class="wt-dn">7</div><img class="mtt" height="60"
src="//c.tadst.com/qfx/w/svg/wt-7.svg" title="Cloudy."
width="60"/>4 / 1 °C<td class="wa"
onclick="wl('/weather/usa/new-vork/ext')"><div</pre>
class="wt-dn">8</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-18.svg" title="Sprinkles late.
0vercast." width="60"/>6 / 1 °Cclass="wa"
onclick="wl('/weather/usa/new-york/ext')"><div
class="wt-dn">9</div><img class="mtt" height="60"
src="//c.tadst.com/qfx/w/svq/wt-7.svg" title="Cloudy."
width="60"/>9 / 3 °C<td class="wa"
onclick="wl('/weather/usa/new-york/ext')"><div</pre>
class="wt-dn">10</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-19.svg" title="Rain. Morning clouds."
width="60"/>5 / 2 °C<div class="wt-
dn">11</div><div class="wt-dn">12</div><td
class="wna"><div class="wt-dn">13</div><div
class="wt-dn">14</div><div</pre>
class="wt-dn">15</div></div>class="tr lk-
block"><a class="read-more" href="/weather/usa/new-york/ext">Detailed
forecast for 14 days</a></div></section><script
type="text/javascript">
TAD.dec="."; TAD.sep=","; et=1738152440;
function f0(d){return TAD.ld[d.getUTCDay()]+', '+d.getUTCDate()+'
```

```
'+TAD.lm[d.getUTCMonth()]+' '+d.getUTCFullYear()+',
'+p2(d.getUTCHours())+':'+p2(d.getUTCMinutes())
+':'+p2(d.getUTCSeconds());}
function f1(d){return d.getUTCDate()+' '+TAD.sm[d.getUTCMonth()]+'
'+d.getUTCFullYear()+', '+p2(d.getUTCHours())
+':'+p2(d.getUTCMinutes())+':'+p2(d.getUTCSeconds());}
cks={"wtct":{"t":[{"o":-18000,"a":"<a href=\"\/time\/zones\/est\"
title=\"Eastern Standard Time\">EST<\/a>"}],"f":f1,"g":{"t":2}}};
TAD.lm=[];TAD.lm[0]='January';TAD.sm=[];TAD.sm[0]='Jan';TAD.ld=[];TAD.
ld[1]='Monday';TAD.ld[2]='Tuesday';TAD.ld[3]='Wednesday';
</script><div class="fixed"><a
href="/weather/city-help.html"> Need some
help?</a></div></article><aside class="layout-grid sky layout-
grid sky--sticky tpl-banner sky"><fieldset
id="ad1"><legend>Advertising</legend><div id="div-gpt-com-
300x600"><script>
AdMgr.dispSlot(0);
</script>
</div></fieldset></aside></main><script
src="//c.tadst.com/com/common/wcommon_33.js"></script> </div>
<footer class="footer">
<section class="feedback-bar">
<div class="fixed feedback-bar wrap">
<section class="feedback-bar__instant-feedback" id="instant-feedback">
<span class="feedback-bar msg">How was your experience?</span>
<span class="feedback-bar thankyou">Thank you for your
feedback!</span>
<a aria-label="Vote for having a good experience" class="feedback-</pre>
bar__thumb feedback-bar__thumb--up" href="#" onclick="return blif(1)"
title="Vote Good"><svg height="24" viewbox="0 0 24 24" width="24"
xmlns="http://www.w3.org/2000/svg"><path d="M0 0h24v24H0V0z"
fill="none"></path><path d="M1 21h4V9H1v12zm22-11c0-1.1-.9-2-2-2h-
6.31l.95-4.57.03-.32c0-.41-.17-.79-.44-1.06L14.17 1 7.59 7.59C7.22
7.95 7 8.45 7 9v10c0 1.1.9 2 2 2h9c.83 0 1.54-.5 1.84-1.22l3.02-
7.05c.09 - .23.14 - .47.14 - .73v - 2z" > </path> </svg> </a>
<a aria-label="Vote for having a bad experience" class="feedback-</pre>
bar thumb feedback-bar thumb--down" href="#" onclick="return
blif(0)" title="Vote Bad"><svg height="24" viewbox="0 0 24 24"
width="24" xmlns="http://www.w3.org/2000/svg"><path d="M0 0h24v24H0z"
fill="none"></path><path d="M15 3H6c-.83 0-1.54.5-1.84 1.22l-3.02
7.05c-.09.23-.14.47-.14.73v2c0 1.1.9 2 2 2h6.31l-.95
4.57-.03.32c0 .41.17.79.44 1.06L9.83 23l6.59-6.59c.36-.36.58-.86.58-
1.41V5c0-1.1-.9-2-2-2zm4 0v12h4V3h-4z"></path></svg>
</a>
</section>
<section class="feedback-bar contact"><a</pre>
href="/information/feedback.html" id="bls1" onclick="return
bls(this)">Contact Us
```

```
<svg height="24" viewbox="0 0 24 24" width="24"</pre>
xmlns="http://www.w3.org/2000/svg"><path d="M20 4H4c-1.1 0-1.99.9-1.99"
2L2 18c0 1.1.9 2 2 2h16c1.1 0 2-.9 2-2V6c0-1.1-.9-2-2-2zm0 4l-8 5-8-
5V618 5 8-5v2z"></path><path d="M0 0h24v24H0z"
fill="none"></path></svg></a></section>
</div>
</section>
<section class="fixed footer wrap">
<section class="footer block footer block--promo">
<article class="footer-card">
<a class="footer-card img-link" href="/services/supporter.html">
<imq alt="Illustration of a pink shield with a white heart."</pre>
class="footer-card img" height="100" loading="lazy"
src="//c.tadst.com/gfx/n/i/service supporter.svg" width="100">
</imq></a>
<section class="footer-card content">
<h4 class="footer-card title">
<a href="/services/supporter.html">
 Love Our Site? Become a Supporter
 </a>
</h4>
Browse our site <strong>advert free.</strong>
Sun & amp; Moon times <strong>precise to the second.</strong>
<strong>Exclusive calendar templates</strong> for PDF
Calendar.
</section>
</article>
<section class="footer logo">
<a href="/" rel="home"><img alt="The timeanddate logo" height="24"</pre>
loading="lazy" src="//c.tadst.com/gfx/n/logo/logo-2021--horizontal-
color-whitebg.svg" width="176"/></a>
<a href="/information/copyright.html">© Time and Date AS 1995—
2025</a>
</section>
</section>
<section class="footer block footer block--links-wrap">
<section class="footer links">
<nav class="footer links-block footer links-block--company">
<h4>Company</h4>
<a href="/company/">About us</a>
<a href="/company/jobs">Careers/Jobs</a>
<a href="/information/feedback.html" id="bls2" onclick="return"
bls(this)">Contact Us</a>
<a href="/information/contact.html">Contact Details</a>
<a href="/sitemap.html">Sitemap</a>
<a href="/newsletter/">Newsletter</a>
```

```
</nav>
<nav class="footer links-block footer links-block--legal">
<h4>Legal</h4>
<a href="/information/copyright.html">Link policy</a>
<a href="/information/advertising.html">Advertising</a>
<a href="/information/disclaimer.html">Disclaimer</a>
<a href="/information/terms-conditions.html">Terms & amp;
Conditions</a>
<a href="/information/privacy.html">Privacy Policy</a>
<a href="/custom/privacy.html">My Privacy</a>
</nav>
<nav class="footer links-block footer links-block--services">
<h4>Services</h4>
<111>
<a href="/worldclock/">World Clock</a>
<a href="/time/">Time Zones</a>
<a href="/calendar/">Calendar</a>
<a href="/weather/">Weather</a>
<a href="/astronomy/">Sun &amp; Moon</a>
<a href="/counters/">Timers</a>
<a href="/date/">Calculators</a>
<a href="/services/api/">API</a>
<a href="/extra/">Apps</a>
</nav>
<nav class="footer__links-block footer__links-block--sites">
<h4>Sites</h4>
<a href="https://www.timeanddate.no">timeanddate.no</a>
<a href="https://www.timeanddate.de">timeanddate.de</a>
</nav>
<section class="footer social">
<h4>Follow Us</h4>
<div class="footer social-icons">
<a href="https://www.facebook.com/timeanddate/"><i</pre>
class="footer social-icon footer social-icon--facebook"
title="timeanddate.com on Facebook"></i></a>
<a href="https://twitter.com/timeanddate"><i class="footer social-</pre>
icon footer__social-icon--twitter" title="timeanddate.com on
Twitter"></\overline{i}></a>
<a href="https://www.linkedin.com/company/time-and-date-as/about/"><i</pre>
class="footer social-icon footer_social-icon--linkedin"
title="timeanddate.com on Linkedin"></i></a>
<a href="https://www.instagram.com/timeanddatecom/"><i
class="footer social-icon footer social-icon--instagram"
```

```
title="timeanddate.com on Instagram"></i></a>
<a href="https://www.youtube.com/c/timeanddate"><i
class="footer__social-icon footer__social-icon--youtube"
title="timeanddate.com on YouTube"></i></a>
</div>
</section>
</section>
© Time and Date AS 1995-2025.
<a href="/information/copyright.html">Privacy & amp; Terms</a>
</section>
</section>
</footer>
<!-- F00TER END -->
<script>
bli();main();
</script>
<div class="wfc" id="FBD" style="display:none"></div>
window.runHeatMap && window.runHeatMap();
</script>
</body></html>
divs = soup.find all("div",class ="h2")
divs
[<div class="h2">0 °C</div>]
tempDiv=divs[0]
tempDiv
<div class="h2">0 °C</div>
temp = tempDiv.get text(strip=True)
temp
{"type":"string"}
print(temp)
0 \, \circ \, C
ps = soup.find all("p")
ps
[Clear.,
 Feels Like: -3 °C<br/><span title="High and low forecasted"
```

```
temperature today">Forecast: 4 / -1 °C</span><br/>Wind: 7 km/h <span
class="comp sa8" title="Wind blowing from 280° West to East">↑</span>
from West,
<a class="read-more" href="/weather/usa/new-</pre>
york/hourly">See more hour-by-hour weather</a>,
<a class="read-more" href="/weather/usa/new-</pre>
york/ext">14 day forecast, day-by-day</a><a class="fr read-more mgr15"</pre>
href="/weather/usa/new-york/hourly">Hour-by-hour forecast for next
week</a>,
Clear. 6 / -1 °C<br/>Humidity: 44%. Wind: 11 km/h <span</p>
class="comp sa8" title="Wind blowing from 270° West to East">↑</span>
from West,
<a class="read-more"</pre>
href="/weather/usa/new-york/historic">More weather last week</a>,
Passing clouds.,
Clear.,
Passing clouds.,
<a class="read-more"</pre>
href="/weather/usa">More weather in USA</a>,
<a class="read-more" href="/weather/usa/new-</pre>
york/historic" title="Click here to see historic weather for past
weeks">View historic weather</a>,
 4 / -1 °C  ,
 3 / -3 °C ,
8 / -2 °C,
 4 / -3 ° C  ,
7 / 0 °C,
 4 / -2 ° C  ,
 3 / -4 °C  ,
7 / 2 °C,
 8 / 1 ° C  ,
 2 / -2 °C  ,
 4 / 0 ° C  ,
4 / 1 °C,
 6 / 1 ° C  ,
 9 / 3 ° C  ,
5 / 2 °C,
<a class="read-more" href="/weather/usa/new-</pre>
york/ext">Detailed forecast for 14 days,
<a href="/weather/city-help.html"> Need
some help?</a>,
<a href="/information/copyright.html">© Time and Date AS 1995—
2025</a>,
© Time and Date AS 1995-2025.
 <a href="/information/copyright.html">Privacy & amp; Terms</a>
descriptionP = ps[0]
```

```
descriptionP
Clear.
description=descriptionP.get text(strip=True)
description
{"type":"string"}
tds = soup.find all("td")
tds
[New York City - Central Park,
27 Jan 2025, 07:24:00
27 Jan 2025, 06:51
16 km,
1017 mbar
41%,
-12 °C,
Now,
08:00
09:00
10:00.
11:00,
12:00,
<img class="mtt" height="80" src="//c.tadst.com/gfx/w/svg/wt-
1.svg" title="Clear." width="80"/>,
<imq class="mtt" height="80" src="//c.tadst.com/qfx/w/svq/wt-
2.svg" title="Mostly sunny." width="80"/>,
<img class="mtt" height="80" src="//c.tadst.com/gfx/w/svg/wt-
1.svg" title="Sunny." width="80"/>,
0 °C,
-1 °C,
0 °C,
1 °C,
2 °C,
3 °C,
<img class="mtt" height="40" src="//c.tadst.com/gfx/w/svg/wt-
1.svg" title="Sunny." width="40"/>,
<img class="mtt" height="40" src="//c.tadst.com/gfx/w/svg/wt-
1.svq" title="Sunny." width="40"/>,
<img class="mtt" height="40" src="//c.tadst.com/gfx/w/svg/wt-
13.svg" title="Clear." width="40"/>,
```

```
<img class="mtt" height="40"
src="//c.tadst.com/gfx/w/svg/wt-17.svg" title="0vercast."
width="40"/>,
<img class="mtt" height="40" src="//c.tadst.com/gfx/w/svg/wt-
6.svg" title="Broken clouds." width="40"/>
<img class="mtt" height="40" src="//c.tadst.com/gfx/w/svg/wt-
4.svg" title="Partly cloudy." width="40"/>,
<img class="mtt" height="40" src="//c.tadst.com/gfx/w/svg/wt-
17.svg" title="Broken clouds." width="40"/>,
0 °C,
4 °C,
2 °C,
1 °C,
1 °C,
2 °C,
-2 °C,
Sunny.,
Sunny.,
Clear.,
0vercast.,
Broken clouds.,
Partly cloudy.,
Broken clouds.,
-5 °C,
-1 °C,
-4 °C,
-4 °C,
-5 °C,
-3 °C,
-2 °C,
18 km/h,
23 km/h,
25 km/h,
27 km/h,
28 km/h,
21 km/h,
3 km/h,
W<br/><span class="comp sa8" title="Wind blowing from 260° West"
to East">↑</span>,
WSW<br/><span class="comp sa6" title="Wind blowing from 240°
West-southwest to East-northeast">↑</span>,
SW<br/><span class="comp sa4" title="Wind blowing from 220°
Southwest to Northeast">↑</span>,
WSW<br/><span class="comp sa6" title="Wind blowing</pre>
from 240° West-southwest to East-northeast">↑</span>,
WSW<br/><span class="comp sa6" title="Wind blowing from 250°
West-southwest to East-northeast">↑</span>,
WNW<br/><span class="comp sa10" title="Wind blowing from 300°</pre>
West-northwest to East-southeast">↑</span>,
```

```
S<br/>span class="comp sa0" title="Wind blowing from 180° South"
to North">↑</span>,
48%
34%.
48%
46%,
50%
32%,
41%,
-10 °C,
-11 °C,
-8 °C,
-9 °C,
-8 °C,
-13 °C,
-14 °C,
11 km
13 km,
12 km,
12 km,
9 km,
12 km
9 km,
0%,
0%,
0%.
1%,
4%,
2%,
0%,
<span class="img-caption">* Updated
Monday, 27 January 2025 02:43:02 New York time - Weather by
CustomWeather, © 2025</span>
<div class="wt-dn">26</div><a
class="read-more" href="/weather/usa/new-york/historic" title="Click
here to see historic weather for past weeks">View historic
weather</a>,
<div
class="wt-dn">27</div><img class="mtt" height="60"
src="//c.tadst.com/qfx/w/svq/wt-2.svg" title="Scattered clouds."
width="60"/>4 / -1 °C,
<div
class="wt-dn">28</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-6.svg" title="Mostly cloudy."
width="60"/>3 / -3 °C,
<div
class="wt-dn">29</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-18.svg" title="Sprinkles late. Mostly
cloudy." width="60"/>8 / -2 °C,
```

```
<div
class="wt-dn">30</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-4.svg" title="Partly cloudy."
width="60"/>4 / -3 °C,
<div
class="wt-dn">31</div><img class="mtt" height="60"
src="//c.tadst.com/qfx/w/svq/wt-18.svg" title="Light rain late.
Overcast." width="60"/>7 / 0 °C,
<div
class="wt-dn">1</div><img class="mtt" height="60"</pre>
src="//c.tadst.com/gfx/w/svg/wt-28.svg" title="Rain changing to snow.
Overcast." width="60"/>4 / -2 °C,
<div
class="wt-dn">2</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-4.svg" title="Increasing cloudiness."
width="60"/>3 / -4 °C,
<div</pre>
class="wt-dn">3</div><img class="mtt" height="60"
src="//c.tadst.com/qfx/w/svq/wt-18.svg" title="Sprinkles early.
Morning clouds." width="60"/>7 / 2°C
<div
class="wt-dn">4</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-2.svg" title="Scattered clouds."
width="60"/>8 / 1 °C,
<div
class="wt-dn">5</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-6.svg" title="Broken clouds."
width="60"/>2 / -2 °C,
<div</pre>
class="wt-dn">6</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-28.svg" title="Snow changing to rain.
Overcast." width="60"/>4 / 0 °C,
<div
class="wt-dn">7</div><img class="mtt" height="60"</pre>
src="//c.tadst.com/qfx/w/svq/wt-7.svg" title="Cloudy."
width="60"/>4 / 1 °C
<div
class="wt-dn">8</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-18.svg" title="Sprinkles late.
Overcast." width="60"/>6 / 1 °C,
<div
class="wt-dn">9</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-7.svg" title="Cloudy."
width="60"/>9 / 3 °C,
<div
class="wt-dn">10</div><img class="mtt" height="60"
src="//c.tadst.com/gfx/w/svg/wt-19.svg" title="Rain. Morning clouds."
width="60"/>5 / 2 °C,
<div class="wt-dn">11</div>,
```

```
<div class="wt-dn">12</div>,
 <div class="wt-dn">13</div>,
 <div class="wt-dn">14</div>,
 <div class="wt-dn">15</div>1
humidityTd = tds[5]
humidityTd
41%
humidity = humidityTd.get text(strip=True)
humidity
{"type":"string"}
data = {
    "Temp":temp,
    "Description":description,
    "Humidity":humidity
}
df = pd.DataFrame(data,index=[0])
df
{"summary":"{\n \make}": \mbox{"df\",\n \mbox{"rows\": 1,\n \"fields\": [\n \"]}}
{\n \"column\": \"Temp\",\n \"properties\": {\n
\"dtype\": \"string\",\n \"num_unique_values\": 1,\n
\"samples\": [\n \"0\\u00a0\\u00b0C\"\n ],\n
\"semantic_type\": \"\",\n \"description\": \"\"\n
                                                                    }\
n },\n {\n \"column\": \"Description\",\n \"properties\": {\n \"dtype\": \"string\",\n
\"num_unique_values\": 1,\n \"samples\": [\n
\"Clear.\"\n ],\n \"semantic_type\": \"\n,\n
\"description\": \"\n }\n },\n {\n \"column\": \"Humidity\",\n \"properties\": {\n \"dtype\": \"string\",\n \"num_unique_values\": 1,\n \"samples\": \""
                                                           \"samples\":
[\n \"41%\"\n ],\n \"semantic_type\": \"\",\n \"description\": \"\"\n }\n ]\
n}","type":"dataframe","variable_name":"df"}
df.to csv("weather.csv",index=False)
dfRead = pd.read csv("weather.csv")
dfRead
{"summary":"{\n \"name\": \"dfRead\",\n \"rows\": 1,\n \"fields\":
\"dtype\": \"string\",\n \"num_unique_values\": 1,\n
```

## Pandas Assignment [10 points each]

1. Create a DataFrame df from this dictionary data which has the index labels and Display a summary of the basic information about this DataFrame and its data.

```
import pandas as pd
data = {
    "Name": ["Alice", "Bob", "Charlie", "David"],
    "Age": [25, 30, 35, 40],
   "City": ["New York", "Los Angeles", "Chicago", "Houston"],
    "Score": [85, 90, 95, 100]
}
df = pd.DataFrame(data, index=["A", "B", "C", "D"])
# Displaying a summary of the DataFrame
print("Basic Information:")
print(df.info())
print("\nSummary Statistics:")
print(df.describe())
Basic Information:
<class 'pandas.core.frame.DataFrame'>
Index: 4 entries, A to D
Data columns (total 4 columns):
    Column Non-Null Count
0
    Name 4 non-null
                            object
1 Age 4 non-null
                            int64
    City 4 non-null
2
                            obiect
3
    Score 4 non-null
                            int64
dtypes: int64(2), object(2)
memory usage: 160.0+ bytes
None
```

```
Summary Statistics:
            Age
                      Score
count
       4.000000
                  4.000000
       32.500000
                  92,500000
mean
std
      6.454972
                   6.454972
min
      25.000000
                  85,000000
25%
      28.750000
                  88.750000
      32,500000
                  92.500000
50%
75%
      36.250000
                  96.250000
max
      40.000000 100.000000
```

1. Return the first 5 rows of the DataFrame df.

```
df.head()
{"summary":"{\n \"name\": \"df\",\n \"rows\": 4,\n \"fields\": [\n
{\n \"column\": \"Name\",\n \"properties\": {\n
\"dtype\": \"string\",\n \"num_unique_values\": 4,\n
\"samples\": [\n \"Bob\",\n \"David\",\n \"Alice\"\n ],\n \"semantic_type\": \"\",\n \"description\": \"\"\n }\n },\n {\n \"column\":
\"Age\",\n \"properties\": {\n \"dtype\": \"nu \"std\": 6,\n \"min\": 25,\n \"max\": 40,\n
                                           \"dtype\": \"number\",\n
\"num_unique_values\": 4,\n \"samples\": [\n 30,\r 40,\n 25\n ],\n \"semantic_type\": \"\",\n \"description\": \"\"\n }\n {\n \"column\":
\"City\",\n \"properties\": {\n \"dtype\": \"string\",\n
\"num unique values\": 4,\n \"samples\": [\n \"Los
Angeles\",\n \"Houston\",\n \"New York\"\
n ],\n \"semantic_type\": \"\",\n
\"num_unique_values\": 4,\n
                                   \"samples\": [\n
                                                             90.\n
n}","type":"dataframe","variable_name":"df"}
```

1. Explain Pandas DataFrame Using Python List

```
## Single List
data = [10, 20, 30, 40]

df = pd.DataFrame(data, columns=["Values"])

print(df)

    Values
0     10
1     20
```

```
2
        30
3
        40
# List of lists
data = [
    [1, "Alice", 85],
[2, "Bob", 90],
[3, "Charlie", 95],
    [4, "David", 100]
]
df = pd.DataFrame(data, columns=["ID", "Name", "Score"])
print(df)
   ID
           Name Score
0
    1
          Alice
                      85
1
                      90
    2
             Bob
2
    3 Charlie
                      95
3
    4
          David
                     100
```

1. How we can rename an index using the rename() method.

```
data = {
    "Name": ["Alice", "Bob", "Charlie", "David"],
    "Age": [25, 30, 35, 40]
df = pd.DataFrame(data, index=["A", "B", "C", "D"])
print("Original DataFrame:")
print(df)
# Renaming index labels
renamed df = df.rename(index={"A": "Alpha", "B": "Beta", "C": "Gamma",
"D": "Delta"})
print("\nDataFrame with Renamed Index:")
print(renamed df)
Original DataFrame:
      Name Age
             25
     Alice
Α
В
       Bob
             30
C
  Charlie
             35
     David
           40
DataFrame with Renamed Index:
          Name Age
                 25
Alpha
         Alice
           Bob
                 30
Beta
```

```
Gamma Charlie 35
Delta David 40
```

1. You have a 2D NumPy array that you have converted into a pandas DataFrame. You want to assign specific index values to the rows of this DataFrame. If you pass a list of index values to the DataFrame, how does it affect the DataFrame, and how would you apply these index values?

```
import numpy as np
# Create a 2D NumPy array
data = np.array([[10, 20, 30], [40, 50, 60], [70, 80, 90]])
# Assign specific index values during DataFrame creation
df = pd.DataFrame(data, columns=["A", "B", "C"], index=["Row1",
"Row2", "Row3"])
print("DataFrame with Assigned Index:")
print(df)
DataFrame with Assigned Index:
      Α
         В
              C
Row1
      10
         20
             30
Row2
     40
         50
              60
Row3 70 80
             90
# Create the DataFrame without assigning an index
df = pd.DataFrame(data, columns=["A", "B", "C"])
# Modify the index after creation
df.index = ["Row1", "Row2", "Row3"]
print("\nModified Index:")
print(df)
Modified Index:
          В
              C
      Α
Row1
      10
         20
              30
Row2 40
         50
              60
Row3 70 80
             90
```

 You have a dictionary of data that you want to store as a pandas Series. After creating the Series and storing it in the df variable, you print it and observe that the data is represented in a one-dimensional linear format. Explain how to create this Series from the dictionary and describe the output you would expect when printing the Series.

```
# Dictionary of data
data = {"Alice": 85, "Bob": 90, "Charlie": 95, "David": 100}
# Create the Series
```

1. You create a dictionary and store it as a DataFrame in the df variable. After printing, the data appears as 2-dimensional rows and columns. How would you create this DataFrame from the dictionary, and what does the output look like?

```
# Dictionary of data
data = {
    "Name": ["Alice", "Bob", "Charlie", "David"],
    "Age": [25, 30, 35, 40],
"City": ["New York", "Los Angeles", "Chicago", "Houston"],
    "Score": [85, 90, 95, 100]
}
# Create the DataFrame
df = pd.DataFrame(data)
# Print the DataFrame
print(df)
      Name
                          City
                                Score
             Age
0
              25
                      New York
     Alice
                                    85
                 Los Angeles
1
       Bob
              30
                                    90
2
  Charlie
              35
                       Chicago
                                    95
3
     David
                       Houston
              40
                                   100
```