```
import requests
from bs4 import BeautifulSoup

# URL of the website to scrape
url = "https://www.layuplist.com/search?q=AAAS"


response = requests.get(url)

# Parse the HTML content of the page
soup = BeautifulSoup(response.text, "html.parser")

table = soup.find("table", {"class": "table"})


headers = [header.text.strip() for header in table.find_all("th")]

# Initialize a list to store the data rows
data = []

for row in table.find_all("tr")[1:]:

    row_data = [cell.text.strip() for cell in row.find_all("td")]

    data.append(row_data)

print("Headers:", headers)
for row in data:
    print(row)
```

```
Headers: ['Course', 'Offered 24W?', 'Distribs', 'Reviews', 'Quality', 'Layup']
['AAAS007.02: Women & Gender in Caribbean', '', 'INT, SOC, W', '0', '3', 'Signup to reveal']
['AAAS007.05: Imagining Freedom', '', 'SOC, CI', '0', '4', 'Signup to reveal']
['AAAS007: First Year Seminar', '', '', '9', '3', 'Signup to reveal']
['AAAS009: Introduction to AAAS Diaspora Studies', '', 'INT, CI', '3', '2', 'Signup to reveal']
['AAAS010: Introduction to African-American Studies', '', 'SOC, CI', '16', '10', 'Signup to reveal']
['AAAS011: Introduction to African Studies', '', 'SOC, NW', '9', '10', 'Signup to reveal']
['AAAS012: Race and Slavery in U.S. History', '', 'SOC, W', '10', '5', 'Signup to reveal']
['AAAS013: Black America since the Civil War', '', 'SOC, W', '0', '0', 'Signup to reveal']
['AAAS014: Pre-Colonial African History', '', 'SOC, NW', '8', '1', 'Signup to reveal']
['AAAS015: History of Africa since 1800', '', 'SOC, NW', '11', '2', 'Signup to reveal']
['AAAS016: History, Culture and Society: The Many Faces of Latin America', '', 'NW, LIT', '18', '2', 'Signup to reveal']
['AAAS018.03: Introduction to African Religions', '', 'NW, TMV', '1', '1', 'Signup to reveal']
['AAAS018: Introduction to African Religions', '', '', '4', '1', 'Signup to reveal']
['AAAS019: Africa and the World', '', 'INT, SOC, NW', '7', '4', 'Signup to reveal']
['AAAS020.01: Dartmouth Black Lives', '', 'SOC, CI', '1', '2', 'Signup to reveal']
['AAAS020.15: Black Feminist Thought', '', 'SOC, CI', '1', '3', 'Signup to reveal']
['AAAS020.50: Lest We Forget: History, Collective Memory and Slavery at Dartmouth', '', 'SOC', '0', '1', 'Signup to reveal']
['AAAS020: Feminist Theory', '', 'SOC', '0', '0', 'Signup to reveal']
['AAAS021.05: Carceral Geographies', '', 'SOC', '1', '-1', 'Signup to reveal']
['AAAS021.10: Race and Modernity: W.E.B. DuBois, James Baldwin, Lorraine Hansberry', '', 'LIT, W', '0', '1', 'Signup to reveal']
['AAAS021.15: Black Ethnicities in the US', '', 'SOC, W', '0', '1', 'Signup to reveal']
['AAAS021.50: The Color Line, Lynching and the Black Public Sphere: Social & Political Thought of Ida Wells & DuBois', '', 'TMV', '0
['AAAS021.75: Black Political Thought', '', 'TMV', '0', '0', 'Signup to reveal']
['AAAS021: Racial Justice', '', 'SOC', '0', '0', 'Signup to reveal']
['AAAS022.10: African American Religion and Culture in Jim Crow America', '', 'TMV, CI', '1', '1', 'Signup to reveal']
['AAAS022.50: Islam in America', '', '', '0', '1', 'Signup to reveal']
['AAAS022: Religion and the Civil Rights Movement', '', 'SOC, CI', '1', '0', 'Signup to reveal']
['AAAS023: The Black Sporting Experience', '', 'SOC, CI', '7', '1', 'Signup to reveal']
['AAAS024.50: Contemporary Black Political Thought and the Modern World', '', 'SOC, W', '0', '0', 'Signup to reveal']
['AAAS024: The Black Radical Tradition in America', '', 'SOC, W', '0', '1', 'Signup to reveal']
['AAAS025: Constructing Black Womanhood', '', 'SOC, CI', '8', '1', 'Signup to reveal']
['AAAS026: Toni Morrison', '', 'INT, LIT, CI', '20', '4', 'Signup to reveal']
['AAAS027: Transformative Spiritual Journeys. Contemporary Memoirs of African American Religion', '', 'TMV, CI', '0', '0', 'Signup to
['AAAS028.10: Race, Space, and Nature', '', 'SOC', '0', '1', 'Signup to reveal']
['AAAS031.10: Dance Theatre of Harlem Workshop: Collaborative Storytelling Through Movement', '', 'ART, CI', '0', '1', 'Signup to rev
['AAAS031.50: Black Theatre Workshop: The August Wilson Experience', '', '', '0', '0', 'Signup to reveal']
['AAAS031.80: Performing Histories & Us', '', 'ART, CI', '0', '0', 'Signup to reveal']
['AAAS031.90: Black Theatre & Storytelling Workshop in XR: Reimagining The Purple Flower (1928)', '', 'ART, CI', '0', '0', 'Signup to
['AAAS031: Black Theater, U.S.A.', '', 'ART, CI', '6', '2', 'Signup to reveal']
['AAAS032.01: Race and Gender in American Film', '', '', '0', '1', 'Signup to reveal']
['AAAS032.02: Black Queer Literature and Film', '', 'ART, CI', '0', '0', 'Signup to reveal']
['AAAS032.05: Cinema of Black Protest', '', 'SOC, W', '0', '5', 'Signup to reveal']
['AAAS032.15: The Making of 21st Century Exhibits: Curating a National Black Theater Museum/Institution', '', 'ART, CI', '0', '0', 'S
['AAAS032.50: Black LGBTQ History', '', 'SOC, W', '0', '1', 'Signup to reveal']
['AAAS033.10: Rituals of Breath: Black Performance and Resistance', '', 'ART, CI', '0', '1', 'Signup to reveal']
['AAAS033: The African American Intellectual', '', '', '2', '1', 'Signup to reveal']
['AAAS034: Early Black American Literature', '', '', '8', '5', 'Signup to reveal']
['AAAS035.01: Black Elegies', '', 'LIT, CI', '0', '0', 'Signup to reveal']
```

```
['AAAS035.50: Introduction to African American Environmental Thought: The Black Outdoors', '', 'LIT, W', '0', '1', 'Signup to reveal
['AAAS035.60: Poetry for the People', '', '', '0', '0', 'Signup to reveal']
['AAAS035: Modern Black American Literature', '', 'LIT, W', '18', '8', 'Signup to reveal']
['AAAS036.50: Rasta and Rastafari', '', 'SOC, NW', '3', '8', 'Signup to reveal']
['AAAS039.01: History of Jazz to 1965', '', '', '0', '0', 'Signup to reveal']
['AAAS039.02: History of Jazz since 1959', '', 'ART, W', '0', '1', 'Signup to reveal']
['AAAS039.03: Advanced Studies in Jazz History: A Century of Jazz at Dartmouth', '', 'ART', '0', '0', 'Signup to reveal']
['AAAS039.05: Utility of Death and Dying in African American Music', '', 'ART, W', '1', '1', 'Signup to reveal']
```

```
import csv
import requests
from bs4 import BeautifulSoup

# URL of the website to scrape
url = "https://www.layuplist.com/search?q=AAAS"


response = requests.get(url)

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


table = soup.find("table", {"class": "table"})


headers = [header.text.strip() for header in table.find_all("th")]

data = []

for row in table.find_all("tr")[1:]:
    # Extract the text from each cell in the row
    row_data = [cell.text.strip() for cell in row.find_all("td")]

    data.append(row_data)


csv_file = "layuplist_aaas.csv"


with open(csv_file, "w", newline="", encoding="utf-8") as file:

    writer = csv.writer(file)
    # Write the headers to the CSV file
    writer.writerow(headers)

    writer.writerows(data)

print(f"Data has been scraped and saved to {csv_file}")
```

```
Data has been scraped and saved to layuplist_aaas.csv
```

Double-click (or enter) to edit

```
import csv
import requests
from bs4 import BeautifulSoup

def scrape_and_save_course_data(course_code, csv_suffix):
    # Construct the URL for the course code
    url = f"https://www.layuplist.com/search?q={course_code}"

    # Send a GET request to the URL
    response = requests.get(url)

    # Parse the HTML content of the page
    soup = BeautifulSoup(response.text, "html.parser")

    # Find the table containing the course information
    table = soup.find("table", {"class": "table"})

    # Extract the headers (column names) from the table
    headers = [header.text.strip() for header in table.find_all("th")]

    # Initialize a list to store the data rows
    data = []

    # Extract the rows of data from the table
    for row in table.find_all("tr")[1:]:
        # Extract the text from each cell in the row
        row_data = [cell.text.strip() for cell in row.find_all("td")]
        # Append the row data to the list
        data.append(row_data)

    # Define the name of the CSV file
    csv_file = f"layuplist_{csv_suffix}.csv"

    # Write the data to a CSV file
    with open(csv_file, "w", newline="", encoding="utf-8") as file:
        # Create a CSV writer object
        writer = csv.writer(file)
        # Write the headers to the CSV file
        writer.writerow(headers)
        # Write the data rows to the CSV file
        writer.writerows(data)

    print(f"Data for {course_code} has been scraped and saved to {csv_file}")

# List of course codes
course_codes = [
    "AAAS", "AMEL", "AMES", "ANTH", "ARAB", "ARTH", "ASCL", "ASTR", "BIOL", "CHEM",
    "CHIN", "CLST", "COCO", "COGS", "COLT", "COSC", "CRWT", "EARS", "ECON", "EDUC",
    "ENGL", "ENGS", "ENVS", "FILM", "FREN", "FRIT", "GEOG", "GERM", "GOVT", "GRK",
    "HCDS", "HEBR", "HIST", "HUM", "INTS", "ITAL", "JAPN", "JWST", "LACS", "LAT",
    "LATS", "LING", "MATH", "MES", "MUS", "NAIS", "NAS", "PBPL", "PHIL", "PHYS",
    "PORT", "PSYC", "QSS", "REL", "RUSS", "SART", "SOCY", "SPAN", "SPEE", "SSOC",
    "THEA", "TUCK", "WGSS", "WRIT"
]

# Iterate over the course codes and scrape data for each
for index, course_code in enumerate(course_codes, start=1):
    scrape_and_save_course_data(course_code, index)
```

```
Data for AAAS has been scraped and saved to layuplist_1.csv
Data for AMEL has been scraped and saved to layuplist_2.csv
Data for AMES has been scraped and saved to layuplist_3.csv
Data for ANTH has been scraped and saved to layuplist_4.csv
Data for ARAB has been scraped and saved to layuplist_5.csv
Data for ARTH has been scraped and saved to layuplist_6.csv
Data for ASCL has been scraped and saved to layuplist_7.csv
Data for ASTR has been scraped and saved to layuplist_8.csv
Data for BIOL has been scraped and saved to layuplist_9.csv
Data for CHEM has been scraped and saved to layuplist_10.csv
Data for CHIN has been scraped and saved to layuplist_11.csv
Data for CLST has been scraped and saved to layuplist_12.csv
---------------------------------------------------------------------------
KeyboardInterrupt                         Traceback (most recent call last)
<ipython-input-12-2bdbb02e3fce> in <cell line: 57>()
     56 # Iterate over the course codes and scrape data for each
     57 for index, course_code in enumerate(course_codes, start=1):
---> 58     scrape_and_save_course_data(course_code, index)

 14 frames 
/usr/lib/python3.10/ssl.py in read(self, len, buffer)
   1157         try:
   1158             if buffer is not None:
-> 1159                 return self._sslobj.read(len, buffer)
   1160             else:
   1161                 return self._sslobj.read(len)

KeyboardInterrupt:
```

```
import csv
import os
import requests
from bs4 import BeautifulSoup

def scrape_and_save_course_data(course_code, csv_suffix):
    # Construct the URL for the course code
    url = f"https://www.layuplist.com/search?q={course_code}"

    response = requests.get(url)

    # Parse the HTML content of the page
    soup = BeautifulSoup(response.text, "html.parser")

    # Find sthe table containing the course information
    table = soup.find("table", {"class": "table"})

    headers = [header.text.strip() for header in table.find_all("th")]

    # Initializes a list to store the data rows
    data = []

    # Extract the rows of data from the table
    for row in table.find_all("tr")[1:]:
        # Extracts the text from each cell in the row
        row_data = [cell.text.strip() for cell in row.find_all("td")]
        # Append the row data to the list
        data.append(row_data)

    # Define the name of the CSV file
    csv_file = f"layuplist_{csv_suffix}.csv"

    #CSV file
    with open(csv_file, "w", newline="", encoding="utf-8") as file:
        # Create a CSV writer object
        writer = csv.writer(file)
        # Write the headers to the CSV file
        writer.writerow(headers)
        # Write the data rows to the CSV file
        writer.writerows(data)

    print(f"Data for {course_code} has been scraped and saved to {csv_file}")

# List of course codes
course_codes = [
    "AAAS", "AMEL", "AMES", "ANTH", "ARAB", "ARTH", "ASCL", "ASTR", "BIOL", "CHEM",
    "CHIN", "CLST", "COCO", "COGS", "COLT", "COSC", "CRWT", "EARS", "ECON", "EDUC",
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    "LATS", "LING", "MATH", "MES", "MUS", "NAIS", "NAS", "PBPL", "PHIL", "PHYS",
    "PORT", "PSYC", "QSS", "REL", "RUSS", "SART", "SOCY", "SPAN", "SPEE", "SSOC",
    "THEA", "TUCK", "WGSS", "WRIT"
]

# Name of the final combined CSV file
final_csv_file = "Final_list.csv"

# Check if the final CSV file already exists and delete it if it does
if os.path.exists(final_csv_file):
    os.remove(final_csv_file)

# Write the data to the final CSV file
with open(final_csv_file, "a", newline="", encoding="utf-8") as final_file:
    final_writer = csv.writer(final_file)

    # Write the header row to the final CSV file
    final_writer.writerow(["Code", "Department Name", "Undergrad Courses", "Quality", "Difficulty", "Workload"])

    # Iterate over each individual CSV file
    for index, course_code in enumerate(course_codes, start=1):
        scrape_and_save_course_data(course_code, index)

       #CSV file
        csv_file = f"layuplist_{index}.csv"
```