

Q1. Write a python program to extract the video URL of the first five videos.

In []:

```
import requests
from bs4 import BeautifulSoup

url = 'https://www.youtube.com/results?search_query=python'

response = requests.get(url)

soup = BeautifulSoup(response.text, 'html.parser')
video_urls =

for vid in soup.findAll('a', attrs={'class': 'yt-uix-tile-link'}):5:
    video_urls.append('https://www.youtube.com' + vid['href'])

print(video_urls)
```

Q2. Write a python program to extract the URL of the video thumbnails of the first five videos.

In []:

```
import requests

from bs4 import BeautifulSoup

url = 'https://www.youtube.com/results?search_query=python'

Make a GET request to fetch the raw HTML content

html_content = requests.get(url).text

Parse the html content

soup = BeautifulSoup(html_content, "lxml")

Print the parsed content i.e. html****print(soup.prettify())

Extract all the <a> tags into a list

a_tags = soup.find_all('a', id='thumbnail')

Get the URL of the first five video thumbnailsfor i in range(5):

print(a_tags[i])
```

Q3. Write a python program to extract the title of the first five videos.

In []:

```
import requests
```

```
from bs4 import BeautifulSoup
```

```
url = 'https://www.youtube.com/results?search_query=python'
```

Make a GET request to fetch the raw HTML content

```
html_content = requests.get(url).text
```

Parse the html content

```
soup = BeautifulSoup(html_content, "lxml")
```

Print the number of videos found

```
video_titles = soup.find_all('a', attrs={'rel': 'spf-pre
```

```
for title in video_titles:
```

```
print(title'title')
```

Q4. Write a python program to extract the number of views of the first five videos.

In []:

```
import requests

from bs4 import BeautifulSoup

URL of the page from which****data is to be extracted

url = "https://www.youtube.com/results?search_query=python"

HTTP request to the webpage

page = requests.get(url)

Parsing the webpage as****an HTML document

soup = BeautifulSoup(page.content, 'html.parser')

Extracting all the <a> tags into a list

tags = soup.find_all('a')

if "watch" in tag['href']:

    Forming complete URL for
    performing HTTP request
    vid_src = "https://www.youtube.com" + tag['href']

    HTTP request to the webpage
    vid_page = requests.get(vid_src)

    Parsing the webpage as an HTML document
    soup = BeautifulSoup(vid_page.content, 'html.parser')

    Extracting views from the HTML document
    views = soup.find('div', attrs={'class': 'watch-view-count'})

    Extracting text from the HTML document
    views = views.text.strip()

print(views)
```

Q5. Write a python program to extract the time of posting of video for the first five videos.

In []:

```
import requests

from bs4 import BeautifulSoup

get the page content

url = 'https://www.youtube.com/results?search_query=python'
page = requests.get(url)

parse the page content

soup = BeautifulSoup(page.content, 'html.parser')

extract the time of posting for the first five videos
for i in range(5):
    video_time = soup.find_all('span', class_='style-scope ytd-thumbnail-overlay-time-status
print("Time of posting for video {} is {}".format(i+1, video_time))
```