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WEB MINING  
LAB  
CSE 3024

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LAB1  
DATE: 5TH AUG 2021  
VIT CHENNAI

Aim : To understand request structure of a web app

Q1. Request structure

### Encoding:

The Encoding API provides a mechanism for handling text in various character encodings, including legacy non-UTF-8 encodings. The API provides four interfaces: TextDecoder , TextEncoder , TextDecoder Stream and TextEncoderStream .

Code:

```
import requests
URL = "https://chennai.vit.ac.in/"
response = requests.get(URL, verify=False)

print("\n\nEncoding-" + response.encoding)
```

OutPut:

```
Encoding-UTF-8
apple@Apples-MacBook-Pro WebMining %
```

### Status code:

HTTP response status codes indicate whether a specific HTTP request has been successfully completed.

Code:

```
import requests
URL = "https://chennai.vit.ac.in/"
response = requests.get(URL, verify=False)

print("\n\nStatus code-" + response.status_code)
```

OutPut:

```
Status code-200  
apple@Apples-MacBook-Pro WebMining %
```

## Headers:

A request header is an HTTP header that can be used in an HTTP request to provide information about the request context, so that the server can tailor the response

Code:

```
import requests  
import json  
URL = "https://chennai.vit.ac.in/"  
response = requests.get(URL, verify=False)  
  
print(json.dumps(response.json, indent = 1))
```

OutPut:

```
Headers{'Date': 'Sun, 08 Aug 2021 15:25:33 GMT', 'Server': 'Apache', 'X-Frame-Options': 'SAMEORIGIN', 'Vary': 'Accept-Encoding', 'X-Powered-By': 'PHP/7.2.27', 'Last-Modified': 'Sun, 08 Aug 2021 12:30:21 GMT', 'Content-Encoding': 'gzip', 'Content-Length': '36786', 'Keep-Alive': 'timeout=5, max=100', 'Connection': 'Keep-Alive', 'Content-Type': 'text/html; charset=UTF-8'}
```

## History

Past responses can be viewed in the dropdown menu of the response pane.

Code:

```
import requests  
URL = "https://chennai.vit.ac.in/"  
response = requests.get(URL, verify=False)  
  
print("\n\nHistory")  
print(response.history)
```

OutPut:

```
History  
[]
```

## Cookies:

Cookies are created to identify you when you visit a new website.

```
import requests
URL = "https://chennai.vit.ac.in/"
response = requests.get(URL, verify=False)

print("\n\nCookies")
print(response.cookies)
```

## OutPut:

```
Cookies
<RequestsCookieJar[]>
```

## Elapsed:

response.elapsed returns a timedelta object with the time elapsed from sending the request to the arrival of the response.

```
import requests
URL = "https://chennai.vit.ac.in/"
response = requests.get(URL, verify=False)

print("\n\nElapsed")
print(response.elapsed)
```

## OutPut:

```
Elapsed
0:00:00.095294
```

Q1 .With the help of the 'Requests' module to download and analyze page contents of 'https://www.vit.ac.in/academics/home ' or 'https://www.vit.ac.in/admissions/overview' or any other page in these menu tabs.

Code:

```
import requests
from bs4 import BeautifulSoup

URL = "https://www.vit.ac.in/admissions/overview"
response = requests.get(URL, verify=False)

soup = BeautifulSoup(response.text, 'lxml')

print(soup.prettify())
```

OutPut:

Below is the content of the page

```

<header class="clearfix section inner_cnt">
  <div class="container">
    <div class="ban_qs_img">
      
    </div>
    <div class="identity-stripe">
    </div>
    <div class="banner_block">
      <div class="section inner_banner">
        <!-- ASC Slider -->
        <div class="region region-customheader">
          <div class="block block-headerimage clearfix" id="block-headerimage-2">
            <div class="content">
              <div class="field field-name-field-header-banner-image field-type-image field-label-hidden">
                <div class="field-items">
                  <div class="field-item even">
                    
                  </div>
                </div>
              </div>
            </div>
          </div>
        </div>
        <div class="bread_crump center">
          <div class="bread-crumbs">
            <span class="bread_img icons">
            </span>
            <ul class="bread_crump_list">
              <li>
                Admissions
              </li>
            </ul>
          </div>
        </div>
      </div>
    </div>
  </div>
</header>
<div class="page_top_fix">
  <!--<a class="main-menu_icon"> <span class="menu-icon"> <span class="menu_txt">Menu</span> <span class="menu_img">

```

Q2. Identify all the sub links in a web app and make a tree of sublinks



