

---

## Step 1 - Run website.py (hiscinema Server), local\_DNS.py & database.py (herCDN Server)



The image displays three terminal windows stacked vertically, each running a different Python script. The top window is titled 'CPS706-Assignment — Python website.py — 141x26' and shows the command 'python website.py' being executed, resulting in the message '\* Running on http://192.168.1.152:40720/ (Press CTRL+C to quit)'. The middle window is titled 'CPS706-Assignment — Python local\_DNS.py — 141x26' and shows the command 'python local\_DNS.py' being executed. The bottom window is titled 'CPS706-Assignment — Python database.py — 141x26' and shows the command 'python database.py' being executed. All three windows show a prompt character (a small square) on the line following the command, indicating they are ready for further input.

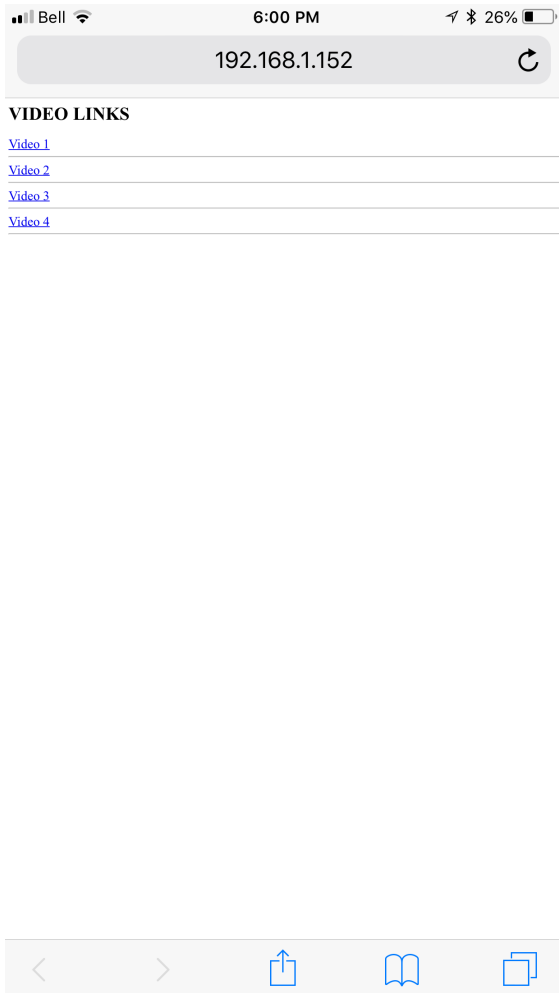
```
CPS706-Assignment — Python website.py — 141x26
Alis-MBP-3:CPS706-Assignment Ali$ python website.py
* Running on http://192.168.1.152:40720/ (Press CTRL+C to quit)
█

CPS706-Assignment — Python local_DNS.py — 141x26
Alis-MBP-3:CPS706-Assignment Ali$ python local_DNS.py
█

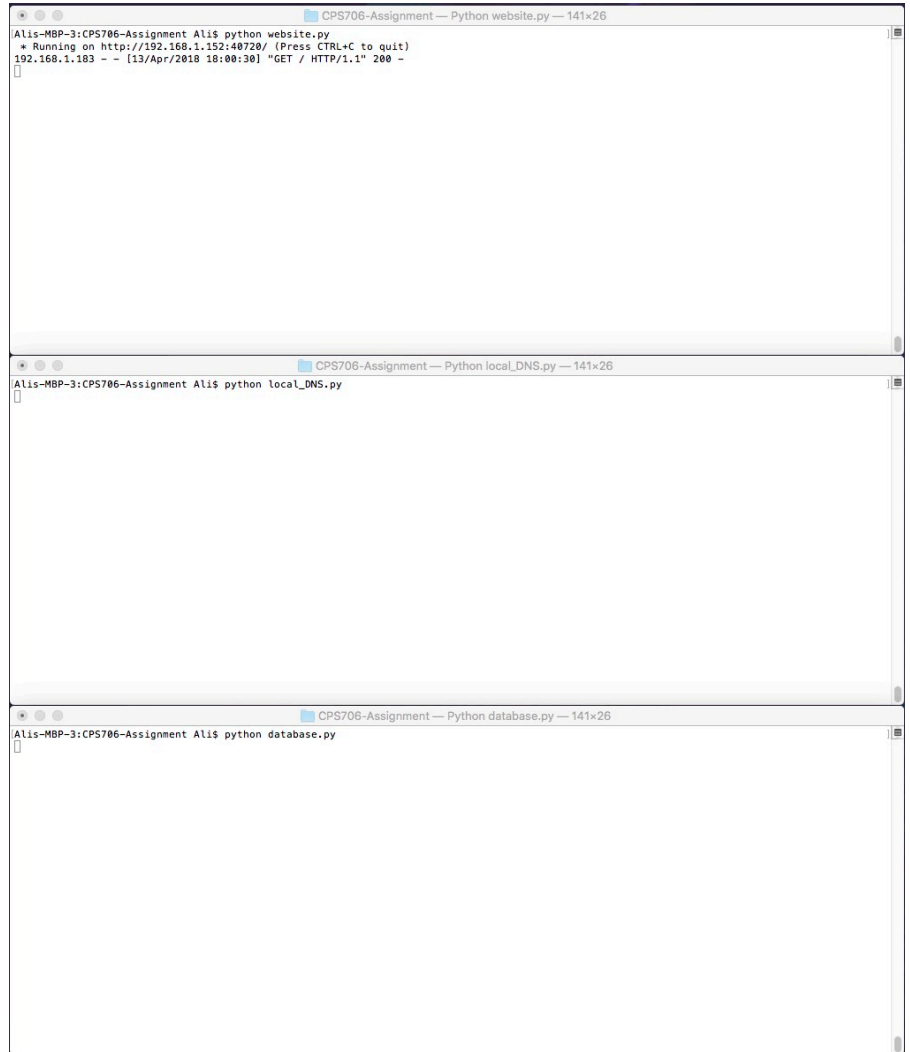
CPS706-Assignment — Python database.py — 141x26
Alis-MBP-3:CPS706-Assignment Ali$ python database.py
█
```

SERVERS

## Step 2 - Client Opens the Web Page, webpage is sent using HTTP 1.1



CLIENT



SERVERS

Step 3 - Client Clicks a link, local DNS receives the request and resolves the request and the herCDN server transfers the video to the client.

```
CPS706-Assignment — Python website.py — 141x26
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Receiving video1 contents now..
Download Complete!
192.168.1.183 - - [13/Apr/2018 18:04:06] "GET /F1/ HTTP/1.1" 200 -
192.168.1.183 - - [13/Apr/2018 18:04:06] "GET /static/downloadedvideo1.mp4 HTTP/1.1" 206 -
192.168.1.183 - - [13/Apr/2018 18:04:06] "GET /static/downloadedvideo1.mp4 HTTP/1.1" 200 -

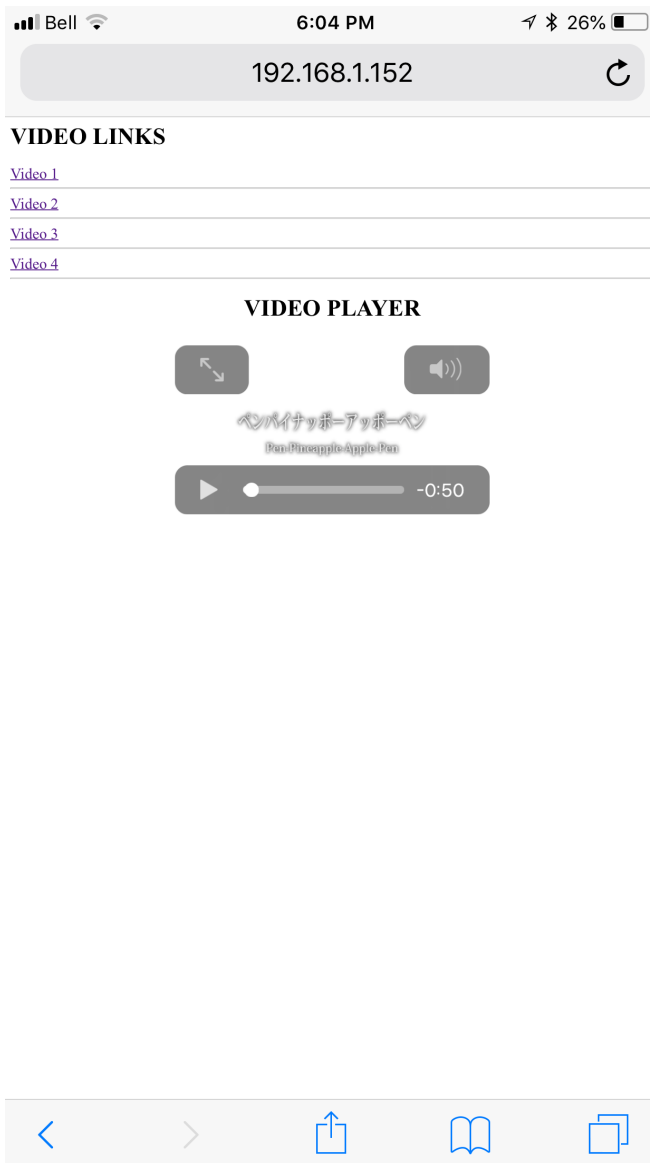
CPS706-Assignment — Python local_DNS.py — 141x26
Alis-MBP-3:CP5706-Assignment Alis$ python local_DNS.py
Local DNS Received Message: hiscinema.com/File1

Recieved data from this address: ('127.0.0.1', 57797)
Resolving the DNS query now..
Query Resolved - Sending back to the client

CPS706-Assignment — Python database.py — 141x26
Alis-MBP-3:CP5706-Assignment Alis$ python database.py

Recieved data: video1
video1 Transfer Complete!
```

## SERVERS



CLIENT