

# Data Representation

## Lab 06.02: API Keys

Lecturer: Andrew Beatty

In this lab we are going to use Python access APIs that need a key

We are using the APIs as described by:

- <https://html2pdf.app/>
- <https://developer.github.com/v3/guides/>

1. Write a python program that will read in a html page from a file and prints it out again

```
f = open("../week02/carviewer2.html", "r")
html = f.read()
print (html)
```

2. Modify the script to use the html2pdf.app api with the key:  
46ceed910c24ff7cce8240e89ec7b71912f6f40f2ec55fd217ce150ad  
6d4f1c4. The script should print out the status code of the response

```
import requests
import json

#html = '<h1>hello world</h1>This is html'
f = open("../week02/carviewer2.html", "r")
html = f.read()
#print (html)

apiKey = '46ceed910c24ff7cce8240e89ec7b71912f6f40f2ec55fd217ce150ad6d4f1c4'
url = 'https://api.html2pdf.app/v1/generate'

data = {'html': html, 'apiKey': apiKey}
response = requests.post(url, json=data)
print (response.status_code)
```

3. Modify the program to write the binary data returned to a file .pdf

```
newFile = open("lab06.02.01.htmlaspdf.pdf", "wb")
newFile.write(response.content)
```

4. Test your code (open the pdf)

Get private data from github:

5. Use curl to check if the API key:

**7aa146eaf0094d3a7b1e81aa1d8fcb0e0ec8b91-0**

Can be used to access github private data (This should all be on one line)

(This key gets deleted if you upload a file to GitHub that contains it, so I have put in a minus sign into it, you should remove the minus sign before using, and do not check in code that has this key in it)

Keys should be stored in environment variables

Remove this  
minus sign

If you get a 401 error,  
then you need to  
recreate the API key.

```
curl -i -H "Authorization: token  
7aa146eaf0094d3a7b1e81aa1d8fcb0e0ec8b91-0  
https://api.github.com/user/repos
```

6. Write python script that will get the information from a private repository called

**datarepresentationstudent/aPrivateOne**

And output the result to a file

```
response = requests.get(url, auth=('token', apiKey))  
  
repoJSON = response.json()  
#print (response.json())  
  
file = open(filename, 'w')  
json.dump(repoJSON, file, indent=4)
```

## Challenge

7. Write a script to get information from your repository
8. Write a script that will make a change to the datarepresentationstudent git account