

Python Lab

My India

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GCP Guild Moderator: gcpguild@kyndryl.com

Task: Create HTML syntax for web page creation with the help of python.

Problem Statement:

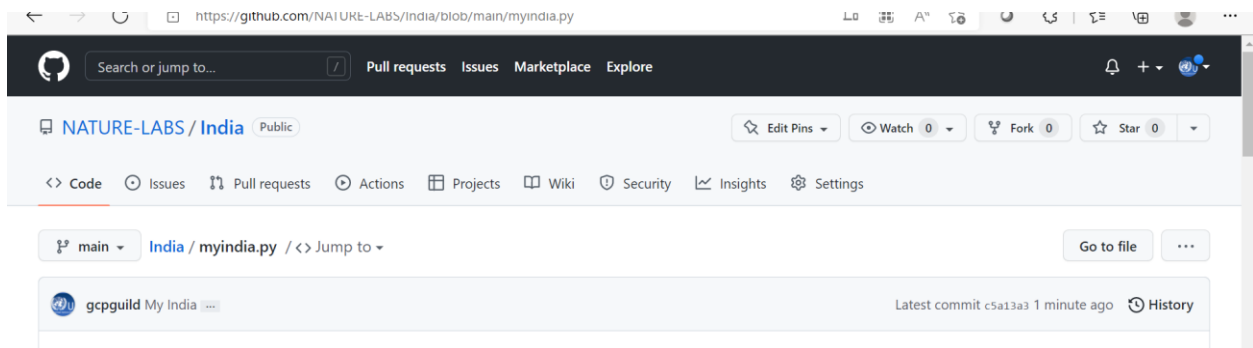
Input Text file: List of States and Union Territories

Output expected: Converting the input text file into HTML syntax for a developer to create a web page.

Download 'myindia.py'

Git Hub

[India/myindia.py at main · NATURE-LABS/India \(github.com\)](https://github.com/NATURE-LABS/India/blob/main/myindia.py)



In your local laptop,

Windows → search for 'CMD'

Open CMD In Windows

Step 1: Go to the Start Menu. This is at the bottom left of the screen. RUN.

Step 2: Type cmd in the search bar and hit Enter

Then they can search for cmd and hit enter.

```
mkdir -p c:\python\indias
```

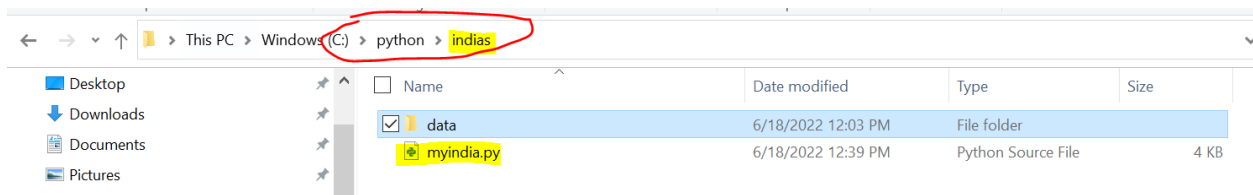
My India : Python to generate HTML Syntax of States and Union Territories of India

Command Prompt

```
Microsoft Windows [Version 10.0.19043.1706]
(c) Microsoft Corporation. All rights reserved.

C:\Users\RamamurthyValavandan>mkdir -p c:\python\indias
```

Download [myindia.py](#) & Save in c:\python\indias folder

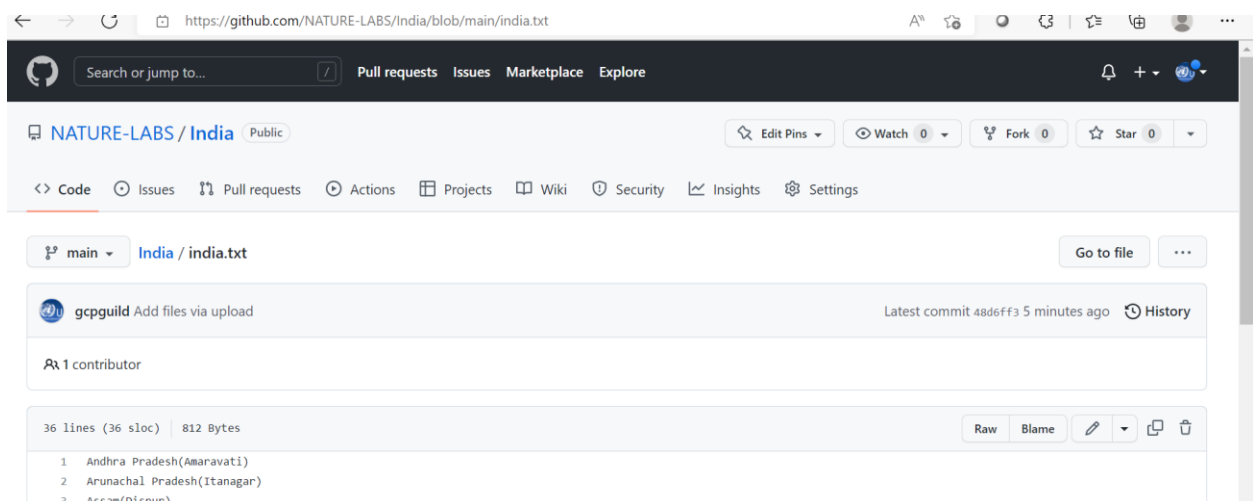


Download india.txt file

GIT Hub : [India/india.txt at main · NATURE-LABS/India \(github.com\)](#)

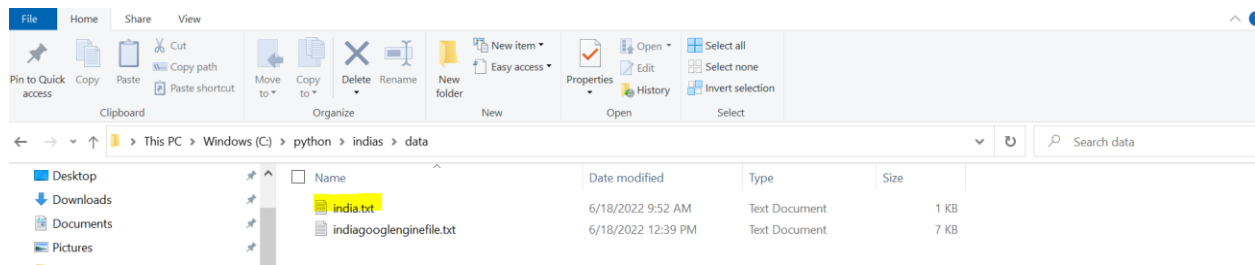
Link

<https://github.com/NATURE-LABS/India/blob/main/india.txt>



Save [india.txt](#) file in c:\python\indias\data Directory

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Finally Execute the Python

Cd c:\python\indias

python myindia.py

```
c:\python\indias>python myindia.py

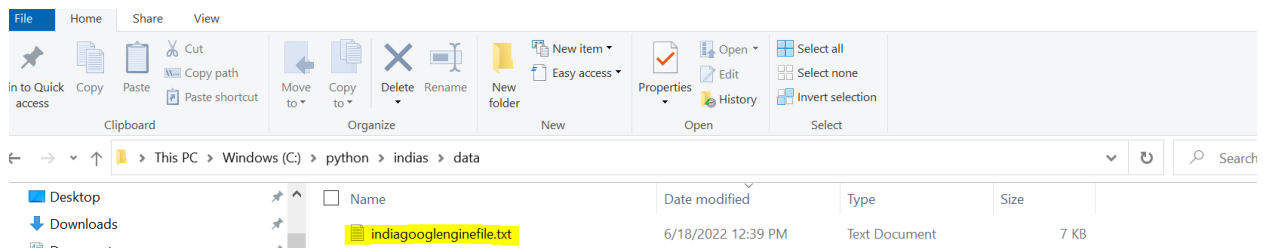
'India file is available ' : C:\python\indias\data\india.txt

India 'The html syntax file is generated ' : C:\python\indias\data\indiagooglenginefile.txt

India 'Use the html file to create web page ' : C:\python\indias\data\indiagooglenginefile.txt

c:\python\indias>
```

The HTML Syntax is Generated



Appendix (Only for Reference)

Reference Web Page Link :

<https://www.googlengine.com/ind>

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Python Code:

```
import pandas as pd
from pathlib import Path
import sys, re

basepath = "C:"
codepath="python"
function = "indias"
N="\\"
namefile = "india"

titlehead = ("{} {}".format('List of States and Union Territories of', namefile.capitalize()))
indiafiletxt = ("{} {}".format(namefile, ".txt"))

inputfile = ("{}{}{}{}{}{}{} {}".format(basepath,N,codepath,N,function,N,"data",N,indiafiletxt))

indiafilepushtxt = ("{} {}".format(namefile, "googlenginefile.txt"))

indiafilegiventxt =
("{}{}{}{}{}{}{} {}".format(basepath,N,codepath,N,function,N,"data",N,indiafilepushtxt))

def prt(p):

    width = len(p) + 4
    print(' ┌' + "─"*width + "┐ ')
    print(' │ ' + p.center(width) + ' │ ')
    print(' └' + "─"*width + "┘ ')

path = Path(inputfile)

if path.is_file():
    pi="\'India file is available \' :"
    p = ("{} {}".format(pi,inputfile))
    prt(p)

else:
    pi="\'India file is missing !\' :"
    p = ("{} {}".format(pi,inputfile))
    prt(p)

    exit(1)

df = pd.read_csv(inputfile, sep=r'[,\;\\n"]+(?!=\\S)', header=None,
on_bad_lines='skip',
engine="python")
```

```

indiaslist = ([list(row) for row in df.values])

def removen(string):

    for m in ('\n', '\r'):
        clean_string = re.sub(m, "", string)
        clean_string = clean_string.replace(m, "")
        clean_string = clean_string.rstrip()
        clean_string = clean_string.strip(m)
        clean_string = re.sub(m, ' ', clean_string)
        clean_string = [re.sub(r"^[a-zA-Z<>.:';2315{}/\-1st]+", ' ', k) for k in clean_string.split("\n")]

    return clean_string

tml = []

def addheadings():

    title = ("{}{}{}").format("<html><head><title>", titlehead, '</title>')
    clean_string = removen(title)
    a = ".join(clean_string)
    tml.append(a)

    hh = ""
    <style>
    h3 {
    color: blue;
    font-family: 'Helvetica Neue', sans-serif;
    font-size: 15px; font-weight: bold;
    letter-spacing: -1px;
    line-height: 2;
    text-align: left;
    }

    </style>

    </head>
    <body>
    ""

    clean_string = removen(hh)
    b = ".join(clean_string)
    tml.append(b)

indias = []

```

```

ss = '('
se = ')'
patten = ("{}{}{}{}".format('(',ss, "[^$]*",se,'))
pats = re.compile("^\s+|\s*|\s*|\s+$")

for i in (indiaslist):

    b = re.findall(patten, str(i))
    if (b):

        ic = " ".join(str(elem) for elem in i).strip()

        ic = re.sub('\(, ', ', str(ic))
        ic = re.sub('\)', ', ', str(ic))
        icl = [x for x in pats.split(ic) if x]
        indias.append(icl)

su = []
for i in range(0,len(indias)):
    if(i ==0):

        th = addheadings()
        bh = ("{}{}{}".format("<h3>",titlehead,"</h3>"))
        tml.append(bh)

    else:
        h = ("{}{}{}{}".format("<h3>",indias[i][0],",",indias[i][1],"</h3>"))
        su.append(str(h))

c = ".join(su)
tml.append(c)
d = ".join(tml)

with open(indiafilegiventxt, 'w') as tfile:

    tfile.write(d)

pi="\The html syntax file is generated \':"
p = ("{} {} {}".format(namefile.capitalize(), pi,indiafilegiventxt))
prt(p)

pi="\Use the html file to create web page \':"
p = ("{} {} {}".format(namefile.capitalize(), pi,indiafilegiventxt))
prt(p)

```

India.txt file – States and Union Territories of India

Text Format : State(Capital)

Andhra Pradesh(Amaravati)
Arunachal Pradesh(Itanagar)
Assam(Dispur)
Bihar(Patna)
Chhattisgarh(Raipur)
Goa(Panaji)
Gujarat(Gandhinagar)
Haryana(Chandigarh)
Himachal Pradesh(Shimla)
Jharkhand(Ranchi)
Karnataka(Bangalore)
Kerala(Thiruvananthapuram)
Madhya Pradesh(Bhopal)
Maharashtra(Mumbai)
Manipur(Imphal)
Meghalaya(Shillong)
Mizoram(Aizawl)
Nagaland(Kohima)
Odisha(Bhubaneswar)
Punjab(Chandigarh)
Rajasthan(Jaipur)
Sikkim(Gangtok)
Tamil Nadu(Chennai)
Telangana(Hyderabad)
Tripura(Agartala)
Uttarakhand(Dehradun)
Uttar Pradesh(Lucknow)
West Bengal(Kolkata)
Andaman and Nicobar Islands(Port Blair)
Chandigarh(Chandigarh)
Dadra and Nagar Haveli and Daman & Diu(Daman)
Delhi (Delhi)
Jammu and Kashmir (Jammu and Srinagar)
Ladakh(Leh)
Lakshadweep(Kavaratti)
Puducherry (Puducherry)

Output HTML Syntax

<pre><html><head><title>List of States and Union Territories of India</title> <style> h3 { color: blue; font-family: 'Helvetica Neue' sans-serif; font-size: 15px; font-weight: bold; letter-spacing: -1px; line-height: 2; text-align: left; } </style> </head> <body><h3>List of States and Union Territories of</pre>
--

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India</h3><h3>Arunachal Pradesh,Itanagar</h3><h3>Assam,Dispur</h3><h3>Bihar,Patna</h3><h3>Chhattisgarh,Raipur</h3><h3>Goa,Panaji</h3><h3>Gujarat,Gandhinagar</h3><h3>Haryana,Chandigarh</h3><h3>Himachal Pradesh,Shimla</h3><h3>Jharkhand,Ranchi</h3><h3>Karnataka,Bangalore</h3><h3>Kerala,Thiruvananthapuram</h3><h3>Madhya Pradesh,Bhopal</h3><h3>Maharashtra,Mumbai</h3><h3>Manipur,Imphal</h3><h3>Meghalaya,Shillong</h3><h3>Mizoram,Aizawl</h3><h3>Nagaland,Kohima</h3><h3>Odisha,Bhubaneswar</h3><h3>Punjab,Chandigarh</h3><h3>Rajasthan,Jaipur</h3><h3>Sikkim,Gangtok</h3><h3>Tamil Nadu,Chennai</h3><h3>Telangana,Hyderabad</h3><h3>Tripura,Agartala</h3><h3>Uttarakhand,Dehradun</h3><h3>Uttar Pradesh,Lucknow</h3><h3>West Bengal,Kolkata</h3><h3>Andaman and Nicobar Islands,Port Blair</h3><h3>Chandigarh,Chandigarh</h3><h3>Dadra and Nagar Haveli and Daman & Diu,Daman</h3><h3>Delhi,Delhi</h3><h3>Jammu and Kashmir,Jammu and Srinagar</h3><h3>Ladakh,Leh</h3><h3>Lakshadweep,Kavaratti</h3><h3>Puducherry,Puducherry</h3>

