

Cybersecurity – Unit 3 Python Homework Assignment

DNS Dictionary challenge

Unit_3-HOMEWORK_ASSIGNMENT > Instructions > Resources > DNSDictionary >  praccpython.py > ...

```
1
2
3 providers = ["Level3", "Verisign", "Google", "Quad9", "DNS.WATCH",
4             "Comodo Secure DNS", "OpenDNS Home", "Norton ConnectSafe",
5             "GreenTeamDNS", "SafeDNS", "OpenNIC", "SmartViper", "Dyn",
6             "FreeDNS", "Alternate DNS", "Yandex.DNS", "UncensoredDNS",
7             "Hurricane Electric", "puntCAT", "Neustar", "Cloudflare",
8             "Fourth Estate"]
9
10 ips = ["209.244.0.3", "64.6.64.6", "8.8.8.8", "9.9.9.9", "84.200.69.80",
11        "8.26.56.26", "208.67.222.222", "199.85.126.10", "81.218.119.11",
12        "195.46.39.39", "69.195.152.204", "208.76.50.50", "216.146.35.35",
13        "37.235.1.174", "198.101.242.72", "77.88.8.8", "91.239.100.100",
14        "74.82.42.42", "109.69.8.51", "156.154.70.1", "1.1.1.1", "45.77.165.194"]
15
16
17 #create an empty dictionary
18 DNS_dictionary = {}
19
20 #use the len command to count the number of items in the providers list
21 #use a variable to define the number of providers
22
23 numberOfProviders = len(providers)
24 print(numberOfProviders)
25
26 '''
27 for x in range(0,22):
28     DNS_dictionary [providers[x]]= ips[x]
29
30 print(DNS_dictionary)
31 '''
32
33 #use for loop to create a list of dictionaries that map each key to their respective value
34
35 for x in range(0,numberOfProviders):
36     DNS_dictionary [providers[x]]= ips[x]
37
38 #run the command
39
40 print(DNS_dictionary)
41
42
```

```
violas-MacBook-Pro:DNSDictionary vroe$ /Library/Frameworks/Python.framework/Versions/3.7/bin/python3 ~/Users/vroe/Desktop/Cyber Bootcamp/UT-TOR-CYBER-PT-09-2019-U-C/Unit_3-HOMEWORK_ASSIGNMENT
/Instructions/Resources/DNSDictionary/DNSDictionary.py
violas-MacBook-Pro:DNSDictionary vroe$ /Library/Frameworks/Python.framework/Versions/3.7/bin/python3 ~/Users/vroe/Desktop/Cyber Bootcamp/UT-TOR-CYBER-PT-09
-2019-U-C/Unit_3-HOMEWORK_ASSIGNMENT/Instructions/Resources/DNSDictionary/praccpython.py
{'Level3': '209.244.0.3', 'Verisign': '64.6.64.6', 'Google': '8.8.8.8', 'Quad9': '9.9.9.9', 'DNS.WATCH': '84.200.69.80', 'Comodo Secure DNS': '8.26.56.26', '
OpenDNS Home': '208.67.222.222', 'Norton ConnectSafe': '199.85.126.10', 'GreenTeamDNS': '81.218.119.11', 'SafeDNS': '195.46.39.39', 'OpenNIC': '69.195.152.20
4', 'SmartViper': '208.76.50.50', 'Dyn': '216.146.35.35', 'FreeDNS': '37.235.1.174', 'Alternate DNS': '198.101.242.72', 'Yandex.DNS': '77.88.8.8', 'Uncensore
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22
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70.1', 'Cloudflare': '1.1.1.1', 'Fourth Estate': '45.77.165.194'}
violas-MacBook-Pro:DNSDictionary vroe$
```

```

#use for loop to create a list of dictionaries that map each key to their respective
for x in range(0,numberOfProviders):
    DNS_dictionary [providers[x]]= ips[x]

##print hurricans electrics IP; item is specified

print(DNS_dictionary["Hurricane Electric"])

```

```

#create an empty list
DNS_list = []

#use a for loop to create a new list within the dictionary

for name, server in DNS_dictionary.items():
    D={"provider_name": name, "primary_server": server}

#append list with information from part 1
    DNS_list.append(D)

print(DNS_list)

```

User Admin Challenge

```

20 def getCreds():
21
22     #create two variables that prompt user to enter username and password
23     user_name = input(f'please enter your username')
24     password = input(f'please enter your password')
25
26     #create an empty list
27     userInfo = []
28     #create two variables
29     z= {"password":password, "username":user_name}
30     admin = {'username':'root', 'password':'toor'}
31
32
33     #append to list
34
35     userInfo.append(z)
36     userInfo.append(admin)
37     print(userInfo)
38
39
40     getCreds()
41

```

3.

```

18 #define a function to take user input
19
20 def getCreds():
21     user_name = input(f'please enter your username ')
22     password = input(f'please enter your password ')
23
24     return {"password":password, "username":user_name}
25
26
27
28 #create a new function to check if user input is in adminList
29
30 def checkLogin(userInfo,adminList):
31
32     for x in adminList:
33
34         if userInfo["username"]==x["username"] and userInfo["password"]==x["password"]:
35             return True
36
37     return False
38
39 #create while loop
40
41
42
43 #create variable to check return value
44 userInfo = getCreds()
45 loggedIn=checkLogin(userInfo,adminList)
46 print(loggedIn)

```

4.

```

42
43 #create variable to check return value
44
45 loggedIn = False
46
47 #create while loop to test user info
48
49 while loggedIn == False :
50     userInfo = getCreds()
51     loggedIn=checkLogin(userInfo,adminList)
52     print("-----")
53
54 print ("YOU HAVE LOGGED IN")
55
56

```

```

please enter your username DSADA
please enter your password DDA
-----
please enter your username root
please enter your password toor
-----
YOU HAVE LOGGED IN
violas-MacBook-Pro:UT-TOR-CYBER-PT-09-2019-U-C vroz$ clear/Library/Frameworks/Python.framework/Versions/3.7/bin/python3 "/Users/vroze/Desktop/Cyber Bootcamp/UT-TOR-CYBER-PT-09-2019-U-C/Unit_3-HOMEWORK_ASSIGNMENT/Instructions/Resources/DNSDictionary/pracpython.py"
bash: clear/Library/Frameworks/Python.framework/Versions/3.7/bin/python3: No such file or directory
violas-MacBook-Pro:UT-TOR-CYBER-PT-09-2019-U-C vroz$ /Library/Frameworks/Python.framework/Versions/3.7/bin/python3 "/Users/vroze/Desktop/Cyber Bootcamp/UT-TOR-CYBER-PT-09-2019-U-C/Unit_3-HOMEWORK_ASSIGNMENT/Instructions/Resources/DNSDictionary/pracpython.py"
please enter your username toor
please enter your password guhgjk
-----
please enter your username 0

```