

Assignment - Dictionary & Set

1. Login Demo

There are 5 usernames with their respective password.

- user1: password1
- user2: password2
- user3: password3

Implement a script such that:

1. Use a suitable data structure to store usernames and passwords
2. User enters username and password
3. Check user username and password
 - If username does not exists, print "User not found"
 - if username exists, but password doesn't match, print "Wrong password"
 - If both username and password match, print "You are in"

```
accounts = {'user1': 'password1', 'user2': 'password2', 'user3': 'password3'}
```

Sample output:

```
Enter username: user10
Enter password: pass10
User not found
```

```
Enter username: user1
Enter password: pass1
Wrong password
```

```
Enter username: user1
Enter password: password1
You are in
```

```
In [ ]: accounts = {'user1': 'password1', 'user2': 'password2', 'user3': 'password3', 'user4': 'password4'}

username = input("Enter username: ")
password = input("Enter password: ")

result = accounts.get(username, False)
# print(result)

if not result:
    print('User not found')
else:
    if password == result:
        print('You are in')
    else:
        print('Wrong password')
```

2. Check Toto Result

The winning number of Toto this week is 7, 20, 29, 41, 47, 49 . Implement a script to help user check result.

- Define a function `match_count(win_nums, your_nums)` which returns counter of matched numbers. It takes in 2 list as parameter, `win_nums` and `your_num` . The `winning_nums` contains winning numbers, and `your_nums` contains number enters by user.
- Ask user to input a list of numbers separated by space

Sample Output:

```
Enter your Toto numbers separated by space:
1 7 20 29 41 47 49 50
Count of matched numbers: 6
```

```
In [ ]: def match_count(win_nums, your_nums):  
        ws = set(win_nums)  
        yn = set(your_nums)  
        matched = (ws & yn)  
        return len(matched)  
  
win_nums = '7 20 29 41 47 49'  
win_nums = win_nums.split()  
# print(win_nums)  
  
print('Enter your Toto numbers separated by space: ')  
your_nums = input()  
your_nums = your_nums.split()  
print(your_nums)  
  
count = match_count(win_nums, your_nums)  
print('Count of matched numbers: ', count)
```

Enter your Toto numbers separated by space: