

# Session\_1

October 23, 2022

## 1 Session 1

### 1.1 Exercise 1:

Write a “Validate” function to check the validity of a given Password. The password must have:

- At least 8 characters - at least 1 digit(s) - at least 1 lower case letter(s) - at least 1 upper case letter(s) - at least 1 non-alphanumeric character(s) such as \*, -, or # .

#### 1.1.1 Solution:

```
[1]: def validate_password(password):  
    if (len(password) < 8):  
        return False  
    l, u, s, d = 0, 0, 0, 0  
    special_chars = ['*', '-', '_', '#']  
    for c in password:  
        if c.islower():  
            l+=1  
        if c.isupper():  
            u+=1  
        if c.isdigit():  
            d+=1  
        if c in special_chars:  
            s+=1  
    return l>0 and u>0 and s>0 and d>0
```

```
[4]: p = input("Enter the password: ")  
if validate_password(p):  
    print('your password is vaild!')  
else:  
    print('your password is NOT valid!')
```

Enter the password: qwerty123456  
your password is NOT valid!

### 1.2 Exercise 2:

Write a “Validate” function to check the validity of a given IP. The IP must be: - A.B.C.D - for example “192.168.0.38”. - A, B, C and D must be a number between 0 and 255

### 1.2.1 Solution:

```
[11]: def validate_ip(ip):  
    r=ip.split(".")  
    if len(r)!=4:  
        return False  
    for i in r:  
        if int(i) not in range(0,256):  
            return False  
    return True
```

```
[12]: ip = input("Enter the ip: ")  
    if validate_ip(ip):  
        print("your ip is valid!")  
    else:  
        print("your ip is NOT valid!")
```

Enter the ip: 192.168.1.1  
your ip is valid!

```
[ ]:
```