

Simplilearn Project 2:

Code: project2.py

```
class BasePasswordManager:
    #def __init__(self):
    old_password=["adsj@1346","S!3pl!learn"]
    def get_password(self):
        #method that returns the current password as a string.
        return self.old_password[-1]

    def is_correct(self,stringg):#that receives a string and returns a boolean
        if stringg == self.old_password[-1]:
            return True
        else:
            return False
```

```
class PasswordManager(BasePasswordManager):#This class inherits from BasePasswordManager

    def __init__(self):
        self.level_old=0
        self.level_new=0
        BasePasswordManager.__init__(self)

    def get_level(self,string):
        self.password=string
        a,n,sp=0,0,0
        for i in self.password:
            if i.isalpha():
                a=a+1
            elif i.isdigit():
                n=n+1
            else:
                sp=sp+1
        if len(self.password)== a:
            return 0
        if len(self.password) == a+n:
            return 1
        if len(self.password)== a+n+sp:
            return 2

    def set_password(self,stringg):
        juna_password=BasePasswordManager.get_password(self)
        self.level_new=self.get_level(stringg)
        self.level_old=self.get_level(juna_password)

        if self.level_new >= self.level_old and len(stringg):
            self.old_password.append(stringg)
            print("New password sucessfully added and securitylevel",self.level_new)
        else:
            print("Password is weak and lower security level than past password")
```

OutPut

Test Case 1

```
In [199]: p=PasswordManager()

In [200]: print("password before change:",p.get_password())
password before change: S!3pl!earn

In [201]: p.set_password("1223245")
Password is weak and lower security level than past password

In [202]: print("password after change:",p.get_password())
password after change: S!3pl!earn

In [203]: p.is_correct("dsfg@1233")
Out[203]: False

In [205]: p.is_correct("S!3pl!earn")
Out[205]: True
```

Test Case 2

```
In [206]: p=PasswordManager()

In [207]: print("password before change:",p.get_password())
password before change: S!3pl!earn

In [208]: p.set_password("dsfg@1233")
New password sucessfully added and securitylevel 2

In [209]: print("password after change:",p.get_password())
password after change: dsfg@1233

In [210]: p.is_correct("dsfg@1233")
Out[210]: True

In [211]: p.is_correct("S!3pl!earn")
Out[211]: False
```