**Mini project:**

**Create a password strength indicator for a login page of our website**

import re

def password\_strength(password):

# Check password length

if len(password) > 8:

length\_score = 2

elif len(password) > 6:

length\_score = 1

else:

length\_score = 0

# Check for uppercase and lowercase letters

has\_uppercase = any(char.isupper() for char in password)

has\_lowercase = any(char.islower() for char in password)

letter\_score = 2 if has\_uppercase and has\_lowercase else 1 if (has\_uppercase or has\_lowercase) else 0

# Check for digits

has\_digit = any(char.isdigit() for char in password)

digit\_score = 1 if has\_digit else 0

# Check for special characters (non-alphanumeric)

has\_special\_char = bool(re.search(r'[!@#$%^&\*()\_+]', password))

special\_char\_score = 2 if has\_special\_char else 0

# Calculate the total score

total\_score = length\_score + letter\_score + digit\_score + special\_char\_score

# Determine password strength

if total\_score >= 5:

strength = "Strong"

elif total\_score >= 3:

strength = "Medium"

else:

strength = "Weak"

return strength

# Input your password

password = input("Enter your password: ")

strength = password\_strength(password)

print(f"Password Strength: {strength}")

**output:**

**Enter your password: 16574897**

**Password Strength: Weak**

**Enter your password: 123456qbf**

**Password Strength: Medium**

**Enter your password: 198qbc123@#**

**Password Strength: Strong**