**Week 2**

**VaultofCodes**

**Python Programming Internship**

TASK: Create a Password Strength Indicator for a login page of our website

Provide a visual indicator showing the strength of the password (e.g., weak, medium, strong).

Consider factors like length, presence of uppercase and lowercase letters, digits, and special characters.

Hint: If password length is >8 it is strong, greater than 6 and less than 8 is medium, less than 5 is weak

**CODE:**

import tkinter as tk

from tkinter import ttk

def check\_password\_strength():

password = password\_entry.get()

strength = 0

if len(password) > 8:

strength += 1

elif len(password) > 6:

strength += 0.5

if any(char.isupper() for char in password):

strength += 1

if any(char.islower() for char in password):

strength += 1

if any(char.isdigit() for char in password):

strength += 1

if any(char in '!@#$%^&\*' for char in password):

strength += 1

if strength < 2:

strength\_label.config(text="Weak", foreground="red")

elif strength < 3.5:

strength\_label.config(text="Medium", foreground="orange")

else:

strength\_label.config(text="Strong", foreground="green")

# Create the main window

root = tk.Tk()

root.title("Password Strength Indicator")

# Create and configure widgets

frame = ttk.Frame(root, padding="10")

frame.grid(column=0, row=0, sticky=(tk.W, tk.E, tk.N, tk.S))

label = ttk.Label(frame, text="Enter your password:")

password\_entry = ttk.Entry(frame, show="\*")

strength\_label = ttk.Label(frame, text="", foreground="black")

check\_button = ttk.Button(frame, text="Check Strength", command=check\_password\_strength)

# Grid layout for widgets

label.grid(column=0, row=0, columnspan=2, sticky=tk.W)

password\_entry.grid(column=0, row=1, columnspan=2, sticky=(tk.W, tk.E))

check\_button.grid(column=0, row=2, columnspan=2)

strength\_label.grid(column=0, row=3, columnspan=2)

root.columnconfigure(0, weight=1)

root.rowconfigure(0, weight=1)

# Start the Tkinter main loop

root.mainloop()

**OUTPUT:**

