Vault of Codes

Mini Project: Create a Password Strength Indicator for a login page of our website.

Program:

```python
import re


def check_password_strength(password):
    # Define regular expressions to check for various password criteria
    length_regex = r'^.{8,}$'
    uppercase_regex = r'[A-Z]'
    lowercase_regex = r'[a-z]'
    digit_regex = r'\d'
    special_char_regex = r'[!@#$%^&*()]'

    # Initialize a score for the password strength
    score = 0

    # Check password length
    if re.match(length_regex, password):
        score += 2
    elif re.match(r'^.{6,7}$', password):
        score += 1

    # Check for uppercase letters
    if re.search(uppercase_regex, password):
        score += 2

    # Check for lowercase letters
    if re.search(lowercase_regex, password):
        score += 2

    # Check for digits
    if re.search(digit_regex, password):
        score += 2

    # Check for special characters
    if re.search(special_char_regex, password):
        score += 2

    # Determine the strength based on the total score
    if score >= 8:
        return "Strong"
    elif score >= 5:
        return "Medium"
    else:
```

```
    return "Weak"


# Example usage:
password = input("Enter your password: ")
strength = check_password_strength(password)
print("Password Strength: " + strength)
```

Output:

Enter your password: Vaultofcodes123

Password Strength: Strong