M06 Password Strength Meter Assignment

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Python Code

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# Step 1: Get password input and initialize strength score
password = input("Enter your password: ")
# Initialize score
score = 0
# Check length
if len(password) \ge 8:
  score += 1
# Check for uppercase
if any(char.isupper() for char in password):
  score += 1
# Check for lowercase
if any(char.islower() for char in password):
  score += 1
# Check for digits
if any(char.isdigit() for char in password):
  score += 1
# Check for special characters
special chars = "!@\#\$\%^\&*()- =+[]\{\};:'\",.<>?/~"
if any(char in special chars for char in password):
  score += 1
# Print raw score for now
print("Password Score:", score)
# Strength Rating
if score \leq 2:
  strength = "Weak"
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elif score == 3 or score == 4:
  strength = "Moderate"
else:
  strength = "Strong"
print(f"Password Strength: {strength}")
# Suggestions for improvement
suggestions = []
if not any(c.isupper() for c in password):
  suggestions.append("Add at least one uppercase letter.")
if not any(c.islower() for c in password):
  suggestions.append("Add at least one lowercase letter.")
if not any(c.isdigit() for c in password):
  suggestions.append("Add at least one digit.")
if any(c.isalnum() for c in password) == False:
  suggestions.append("Add at least one special character.")
if len(password) < 8:
  suggestions.append("Make the password at least 8 characters long.")
if suggestions:
  print("Suggestions to improve your password:")
  for tip in suggestions:
     print("-", tip)
else:
  print("No suggestions needed. Your password is strong.")
Results
Password entered: KjHill8775675!!!
Password Score: 5
Password Strength: Strong
```

No suggestions needed. Your password is strong.

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# Check for special characters

special_chars = "!@#$%^&*()-_=+[]{}|;:'\",.<>?/~`"

if any(char in special_chars for char in password):

score += 1

# Print raw score for now

print("Password Score:", score)

Enter your password: KjHill8775675!!!

Password Score: 5
```

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[2] # Strength Rating
    if score <= 2:
        strength = "Weak"
    elif score == 3 or score == 4:
        strength = "Moderate"
    else:
        strength = "Strong"

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

Password Strength: Strong
```

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For tip in suggestions.

print("-", tip)

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 print("No suggestions needed. Your password is strong.")

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