

STRING & DATE AND TIME API

1. Design a system to **evaluate and score passwords** based on the following criteria:

- Contains both upper and lower case letters (+2 points)
- Contains at least one digit (+2 points)
- Contains at least one special character (!@#\$%^&*()_+) (+2 points)
- Length ≥ 12 (+2 points), Length ≥ 8 (+1 point)
- Does not contain any repeated substring of length ≥ 3 (-2 points)

Print each password's score and whether it is "**Strong**" (≥ 6 points), "**Moderate**" (4-5), or "**Weak**" (< 4).

Sample Run

Pass123! - Score: 5 - Moderate

password - Score: 1 - Weak

Secur3P@ssword123 - Score: 8 - Strong

abcbabc - Score: 0 - Weak

A1b2C3d4! - Score: 6 - Strong

2. You are given a **compressed pattern** string that may include numbers indicating repeated characters, e.g., "a3b2" means "aaabb". Write a method that decompresses it and checks if a target string matches the decompressed version.

3. Design a program that receives employee **login** and **logout** timestamps for a given day and calculates:

Total hours worked.

Whether the employee was late (expected login time is 9:00 AM).

Whether the employee left early (expected logout time is 6:00 PM).

Sample Run

Login Time: "2025-07-28T09:15:00"

Logout Time: "2025-07-28T17:30:00"

Total worked hours: 8 hours 15 minutes

Late: Yes

Left Early: Yes