

Task 10 : Password Strength Analyzer

Objective: Build a tool in Python that checks password strength based on rules.

Tools : Python, VS Code or Jupyter

Deliverables: password_checker.py, Sample input/output screenshots

Hints/Mini Guide:

- Use any(), isupper(), isdigit(), len()
- Example strong: S@fep4ss123

Outcome: Understand password vulnerabilities and how to test for strong passwords.

Interview Questions:

1. What makes a password strong?
2. How can passwords be stored securely?
3. What is hashing and salting?
4. What is brute force attack?
5. What are common password mistakes?
6. How does two-factor authentication work?
7. What are password managers?
8. What is the role of regex in password validation?
9. How can password policies be enforced in companies?
10. What is social engineering in cybersecurity?

Key Concepts: Cyber Hygiene, Password Policy, Input Validation

🌟 Task Submission Guidelines

🕒 Time Window:

You've got a 12-hour window—from 10:00 AM to 10:00 PM—to give your best. It's your time to shine. But remember, once the clock hits 10:00 PM, submissions close.

🔍 Self-Research Allowed:

You're not alone—but we believe in your ability to explore and grow. Feel free to use Google, YouTube, or any learning resource. Learning how to learn is your biggest strength.

🔧 Debug Yourself:

Mistakes? Perfect. That's how real learning happens. Try solving issues on your own—it'll build your confidence and sharpen your problem-solving skills for the future.

💰 No Paid Tools:

We value learning over luxury. If any task points to a paid tool, skip it. Don't spend a single rupee. Just search for free, open-source options—we promise, it's part of the real-world hustle.

📁 GitHub Submission:

For each task, start fresh. Create a new GitHub repo.

Upload everything you used—your code, dataset, screenshots (if any), and a short README.md. That README is your story—tell us what you built, why, and how.

✉️ Submission:

When you're done and proud of what you've built, drop your GitHub repo link through the submission form. Let your work speak for you.

