Task 1: Understanding Cyber Security Basics & Attack Surface

Tools:

- Primary: Browser (Chrome / Firefox)
- Alternatives: OWASP Website, Google Cybersecurity Blog

Hints / Mini Guide:

1. Start by researching what cyber security means, focusing on confidentiality, integrity, and availability (CIA triad) with real-world examples like banking and social media.
2. Identify different types of attackers such as script kiddies, insiders, hacktivists, and nation-state actors by reading credible security blogs.
3. Explore common attack surfaces like web applications, mobile apps, APIs, networks, and cloud infrastructure.
4. Visit OWASP Top 10 and carefully read each vulnerability description to understand why they are dangerous.
5. Map daily-used applications (email, WhatsApp, banking apps) to possible attack surfaces.
6. Document how data flows from user → application → server → database.
7. Identify where attacks can happen during this flow.
8. Summarize the entire understanding in your own words for clarity.

Deliverables:

- PDF/Doc explaining CIA triad, attack types, and attack surfaces

Final Outcome:

- Strong foundation of cyber security concepts and threat awareness

Interview Questions Related To Above Task:

- What is the CIA triad?
- What is an attack surface?
- Difference between vulnerability, threat, and risk?
- What are common cyber attackers?
- Why is OWASP Top 10 important?

📌 **Task Submission Guidelines**

- ⏰ **Time Window:**

Youcan complete the task anytime between 10:00 AM to 10:00 PM on the given day. Submission link closes at 10:00 PM

- 🔍 **Self-Research Allowed:**

Youare free to explore, Google, or refer to tutorials to understand concepts and complete the task effectively.

- 🛠️ **Debug Yourself:**

Tryto resolve all errors by yourself. This helps you learn problem-solving and ensures you don't face the same issues in future tasks.

- 💸 **No Paid Tools:**

Ifthe task involves any paid software/tools, do not purchase anything. Just learn the process or find free alternatives.

- 📁 **GitHub Submission:**

Create a new GitHub repository for each task.
Add everything you used for the task — code, datasets, screenshots (if any), and a short README.md explaining what you did.

📤 **Submit Here:**

After completing the task, paste your GitHub repo link and submit it using the link below:

- 👉 [Submission Link]