WINTER ARC – Python Programming Roadmap (30 Days)

Challenge Overview

The Python Programming track is designed to build strong problem-solving and programming foundations. Participants will progress from Python basics to automation, APIs, and a mini project by the end of Winter Arc.

30-Day Learning Roadmap

- Days 1–4: Python setup, syntax, variables, data types, and basic I/O
- Days 5–7: Conditional statements, loops, and problem-solving practice
- Days 8–12: Functions, lists, tuples, sets, dictionaries, and strings
- Days 13–15: File handling, error handling, and Object-Oriented Programming basics
- Days 16–18: Advanced OOP concepts, modules, packages, and virtual environments
- Days 19–22: APIs, JSON handling, automation scripts, and debugging
- Days 23–24: Code optimization, refactoring, and testing basics
- Days 25–29: Python mini project planning, development, and improvement
- Day 30: Project showcase and reflection

Posting & Submission Rules (IMPORTANT)

• For all TECH challenges (Python included), daily task completion MUST be posted on LinkedIn or X (Twitter).
• Tag the official Winter Arc / Matrix handle and use the official hashtags.
• GitHub repository links, code snippets, screenshots, or learning summaries are acceptable.
• Submissions without social proof will not be eligible for XP.

What to Post Daily

• Concepts learned or revised today
• Problems solved or scripts written
• Errors faced and how you fixed them
• One key Python takeaway

Strategies to Win the Python Track

• Practice coding daily even if it’s small.
• Focus on writing clean and readable code.
• Revisit and refactor older programs weekly.
• Solve real-world problems using Python scripts.
• Maintain consistency to protect your XP streak.

Fair Play & Discipline

• All Python submissions must be original.
• Plagiarism or blind copy-paste is prohibited.
• AI assistance must be disclosed clearly.
• Matrix reserves the right to revoke XP, ranks, or rewards.