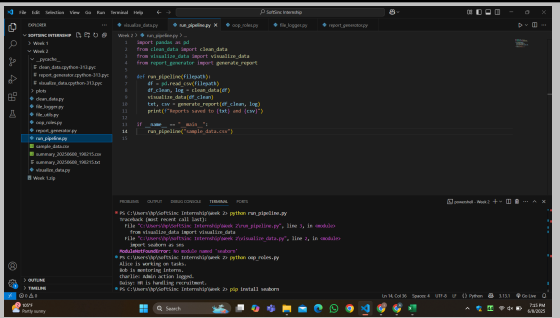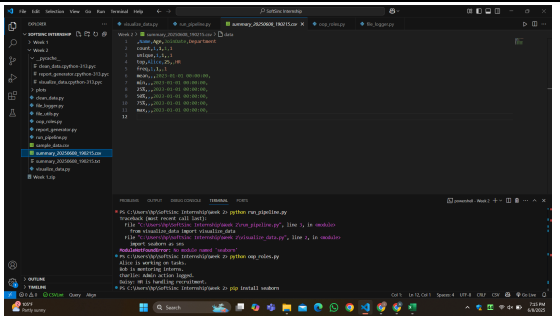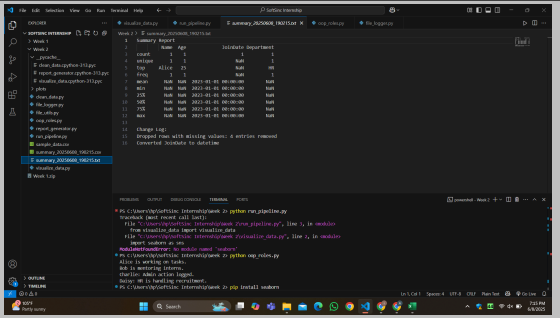# SoftSinc Internship - Week 2 Tasks
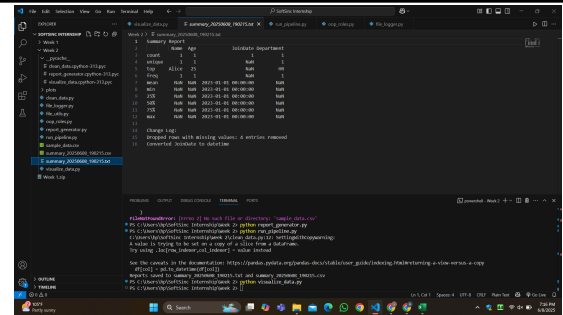
Written by Abdul Rafay Ashfaq

This document outlines the tasks completed during Week 2 of the Softsinc Internship Program 2025. The focus of the week was code analysis and review through hands-on tasks and real-world simulations. Below are the highlights of the work completed, along with relevant screenshots.

Task Description	Screenshots of Work Done
Code Optimization Challenge **Refactored inefficient Python code using list comprehensions and proper algorithmic techniques. Measured performance improvements using the time module.**	
Static Code Analysis **Used tools like flake8 and pylint to identify and fix syntax issues, formatting problems, and common anti-patterns in multiple Python scripts.**	
Code Commenting and Documentation **Added inline comments and docstrings to undocumented functions and classes. Improved overall readability and maintainability of code.**	

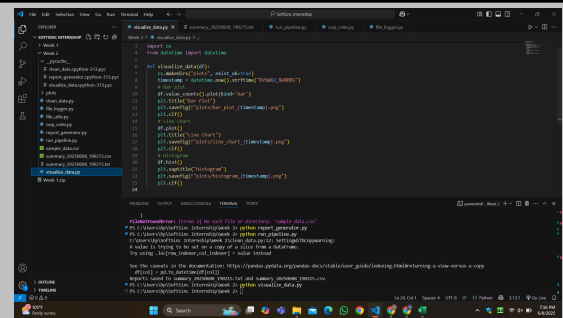| **Debugging Practice** **Used the built-in Python debugger (pdb) to step through faulty scripts and fix logical and runtime errors.**	
Unit Testing Introduction **Wrote basic unit tests using Python's unittest module. Covered function outputs and error handling cases with multiple assertions.**	
Code Review Simulation **Performed a simulated peer review of another intern's codebase. Gave constructive feedback based on clarity, efficiency, and coding standards.**	