Week - 5 - CI/CD Pipeline - Customer Orders

Objective:

- 1. To automate the customer order delay analysis workflow using Azure DevOps, which:
- 2. Loads cleaned customer order and delivery data using a Python script.
- 3. Summarizes total and delayed orders with delay statistics.
- 4. Logs delay summary to a file for reporting and tracking.
- 5. Executes the entire workflow automatically through Azure DevOps pipelines with success notification.

Pre-requisites:

Before you begin, make sure you have:

- Authentication: SSH Key or Personal Access Token (PAT) configured.
- Tools Installed:
- 1. Git
- 2. Python 3.x
- 3. VS Code or any preferred IDE
- Local Project Folder contains:
- Python script: alert_threshold.py
- Azure DevOps pipeline config file: azure-pipelines.yml

Step-by-Step Execution

Step 1: Create Python Script & YAML in Local Folder

Step 2: Create Azure DevOps Project

- 1. Go to Azure DevOps Portal.
- 2. Click "New Project".
- 3. Enter project name and visibility.
- 4. Click "Create".

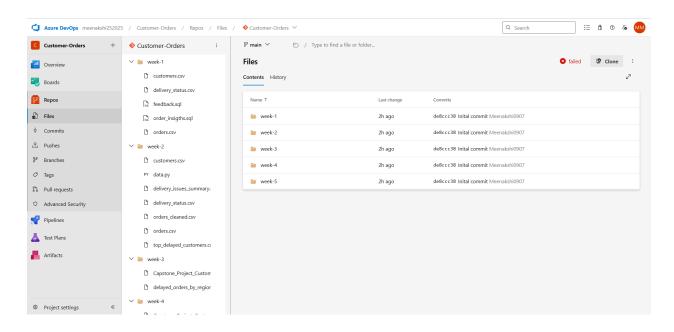
Step 3: Push Local Code to Azure Repo via SSH

>> cd C:\Users\meena\OneDrive\Documents\Hexaware-projects\Project-DE\Customer-or	rder
--	------

>> git init

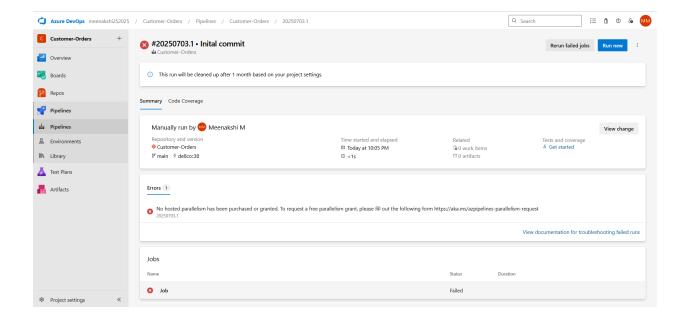
>> git add .

- >> git commit -m "Inital commit"
- >> git remote add origin
- "git@ssh.dev.azure.com:v3/meenakshi252025/Customer-Orders/Customer-Orders"
- >> git push -u origin main



Step 4: Configure and Run Azure Pipeline

- 1. In Azure DevOps, go to Pipelines \rightarrow Create Pipeline.
- 2. Select:
- Code source: Azure Repos Git
- Your repository
- Choose: "Existing Azure Pipelines YAML file"
- 3. Specify:
- Branch: main
- YAML Path: /Week 5/azure-pipelines.yml
- 4. Click Continue \rightarrow Run.



Final Output

Pipeline successfully completed

- Python logs are generated
- deley_summary.log is published