**Deliverable 1: Azure DevOps YAML Pipeline File**

This is the fully structured YAML file (azure-pipelines.yml) that defines your automation process. It follows the sample provided in your Capstone document.

YAML

# azure-pipelines.yml

# Capstone Task: Create a simple Azure DevOps pipeline to run Python scripts

trigger:

- main # Trigger the pipeline automatically whenever code is pushed to the 'main' branch

pool:

vmImage: 'ubuntu-latest' # Use a standard Ubuntu agent image

steps:

# Task 1: Setup Python Environment

- task: UsePythonVersion@0

displayName: 'Use Python 3.x'

inputs:

versionSpec: '3.x' # Ensure Python 3 is available

# Task 2: Install Dependencies (Capstone Task: Install dependencies)

- script: |

python -m pip install --upgrade pip

pip install -r requirements.txt

displayName: 'Install Dependencies'

# Task 3: Execute the Project (Capstone Task: Execute the project)

# This step runs your main processing logic.

- script: |

python run\_pipeline.py

displayName: 'Run Supply Chain Script'

# Capstone Task: Log the results and mark completion (The script's print output will be logged here)

**📝 Deliverable 2: Execution Log Example**

A successful run of the pipeline will generate a log similar to this in the Azure DevOps console, confirming the script ran, installed dependencies, and produced output.

Starting: Run Supply Chain Script

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Task : Command Line

Description : Run a command line script using Bash on Linux and macOS and Command on Windows

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--- Starting Supply Chain Monitoring Script ---

--- FINAL PROCESSED RESULTS (Logged) ---

order\_id supplier\_id delay\_days is\_delayed

0 103 S001 2 1

1 107 S003 56 1

\*\*\* Supply Chain Script Execution Complete \*\*\*

Finishing: Run Supply Chain Script