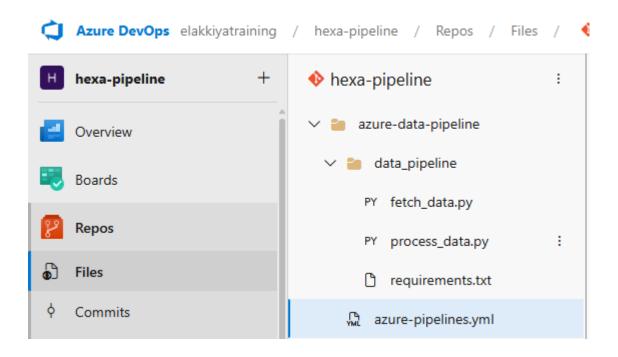
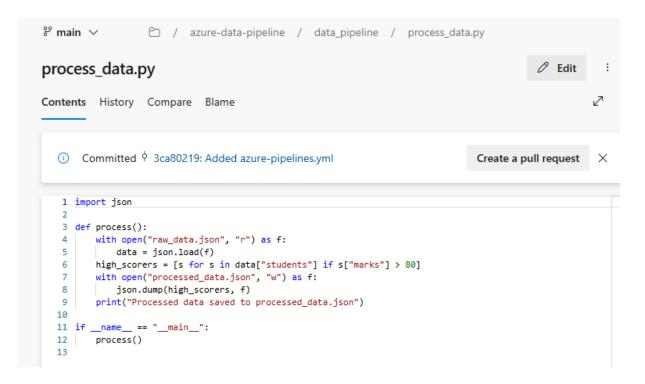
# Creating Pipeline in Azure DevOps

## **Project Structure**



#### Step 1: Sample Python Scripts

```
🖰 / azure-data-pipeline / data_pipeline / fetch_data.py
                                                                                                     fetch_data.py
                                                                                                                Z
Contents History Compare Blame
   ○ Committed ♦ 3ca80219: Added azure-pipelines.yml
                                                                                        Create a pull request
    1 import json
   3 def fetch():
          data = {"students": [
            {"id": 1, "name": "Abhinav", "marks": 78},
{"id": 2, "name": "Priya", "marks": 85},
{"id": 3, "name": "Rahul", "marks": 92},
    6
    8
   9
          with open("raw_data.json", "w") as f:
          json.dump(data, f)
   10
   11
         print("Raw data fetched and saved to raw_data.json")
   12
   13 if __name__ == "__main__":
   14
         fetch()
   15
```

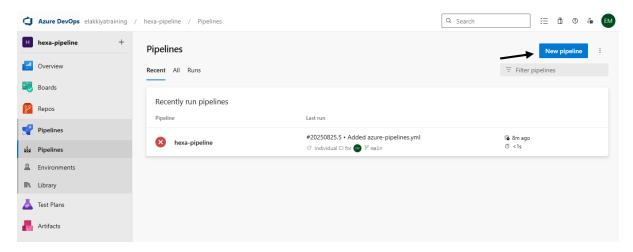


### Step 2: Azure Pipelines YAML (azure-pipelines.yml)

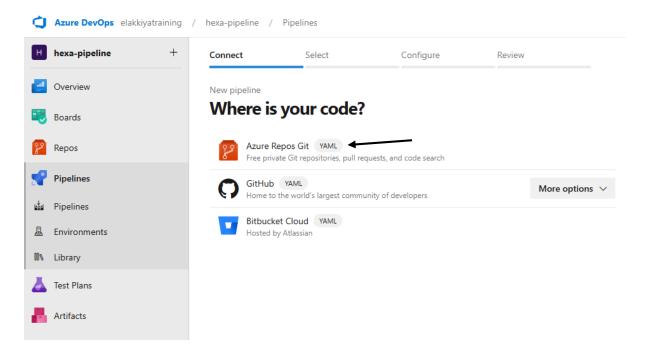
```
<sup>go</sup> main ∨
                   🖰 / azure-data-pipeline / azure-pipelines.yml
azure-pipelines.yml
                                                                                          Contents History Compare Blame
  ○ Committed ♦ 3ca80219: Added azure-pipelines.yml
                                                                                Create a pull request
   1 trigger:
   2 - main
   4 pool:
   5 vmImage: ubuntu-latest
   8 # 1) Checkout code
   9 - checkout: self
  11 # 2) Set up Python
  12 - task: UsePythonVersion@0
       versionSpec: '3.10'
  14
        addToPath: true
  15
  17 # 3) Install dependencies
  18 - script: |
  19
       python -m pip install --upgrade pip
         pip install -r data_pipeline/requirements.txt
  21 workingDirectory: azure-data-pipeline
  22 displayName: Install dependencies
  24 # 4) Fetch raw data
  25 - script: |
  26
       python fetch_data.py
  27 workingDirectory: azure-data-pipeline/data_pipeline
  28 | displayName: Fetch raw data
  30 # 5) Process data
  31 - script:
  32
       python process_data.py
  33 workingDirectory: azure-data-pipeline/data_pipeline
  34 displayName: Process data
  35
  36 # 6) Publish artifact
  37 - task: PublishBuildArtifacts@1
  38 inputs:
  39
        PathtoPublish: 'azure-data-pipeline/data_pipeline/processed_data.json'
  40
         ArtifactName: 'ProcessedData'
  41
       publishLocation: 'Container'
  42
```

#### Step 3: How to Run

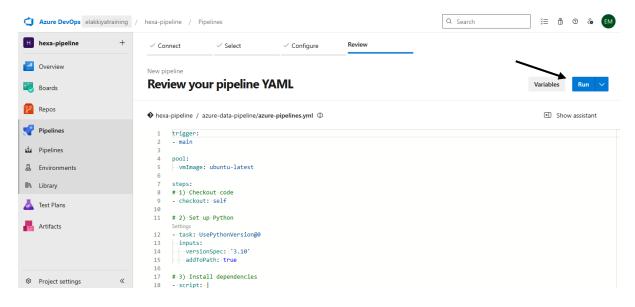
1. Go to Azure DevOps Portal  $\rightarrow$  Pipelines.



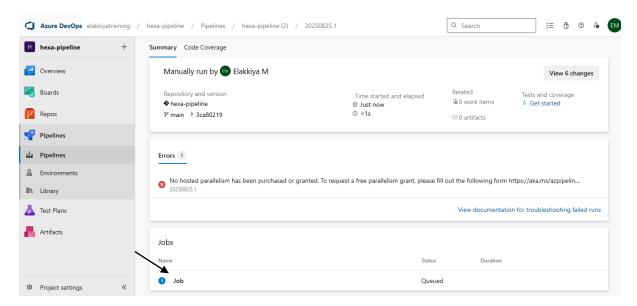
2. Click New Pipeline  $\rightarrow$  Connect your repo  $\rightarrow$  Select YAML.



3. Point it to azure-pipelines.yml.



#### 4. Save & Run.



This is how we create the pipeline in azure DevOps but we need subscription to run the job.