

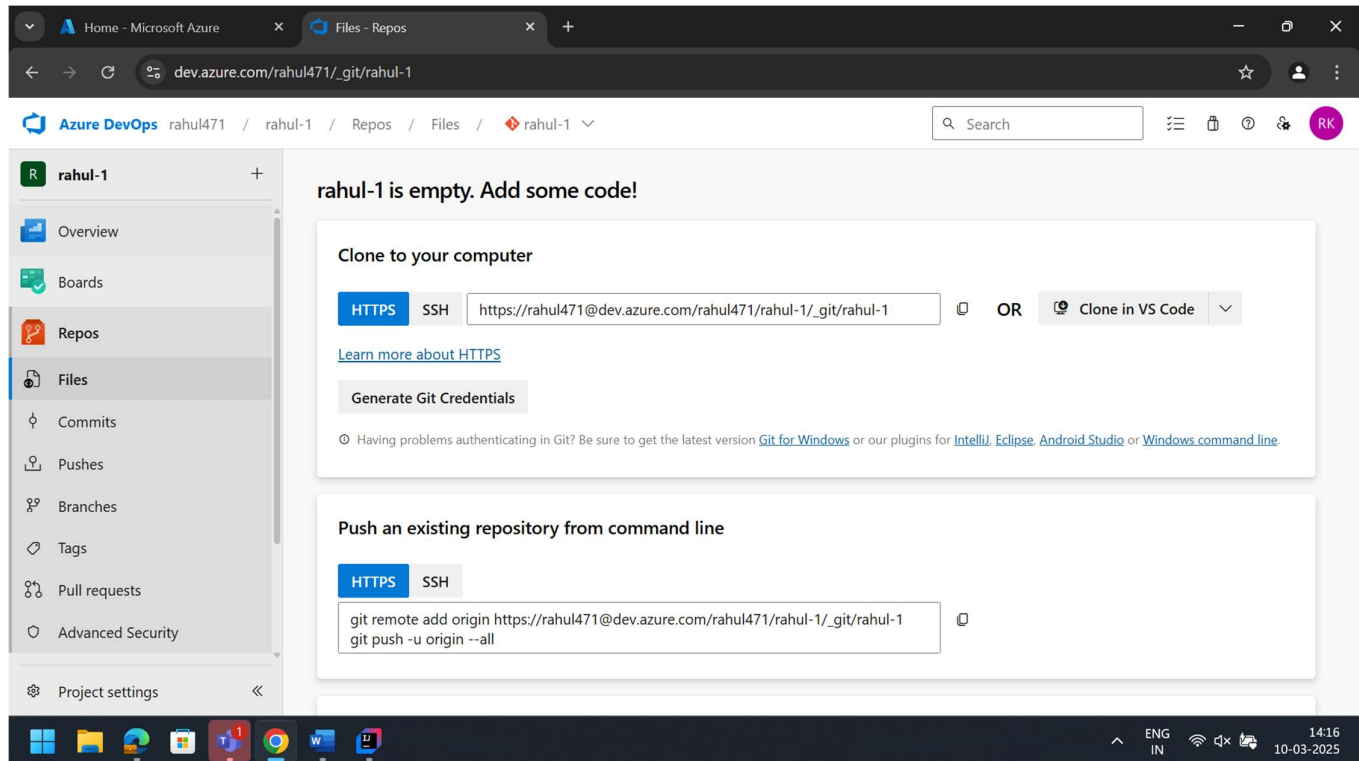
Lab Exam: Azure devOps pipeline

You will find a spring boot project , fist run project locally and ensure test cases are running and jacoco code coverage is working.

Now Create azure repo and push the project the azure repo and create 2 more branches test and dev.

Now Create declaritve CI pipeline using azure pipeline and put the snapshot of result in an word document and push to github

Created repo



Committed and pushed to master

rahul-1 - Repos

dev.azure.com/rahul471/rahul-1/_git/rahul-1?version=GBmaster

Azure DevOps rahul471 / rahul-1 / Repos / Files / rahul-1

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rahul-1

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rahul-1

> .mvn
> src
.gitattributes
.gitignore
Dockerfile
k8s.yaml
mvnw
mvnw.cmd
pom.xml
pom.xml~

master

Type to find a file or folder...

Files

Set up build Clone

Contents History

Name ↑	Last change	Commits
.mvn	Just now	5711ce95 first commit RahulKalekar
src	Just now	5711ce95 first commit RahulKalekar
.gitattributes	Just now	5711ce95 first commit RahulKalekar
.gitignore	Just now	5711ce95 first commit RahulKalekar
Dockerfile	Just now	5711ce95 first commit RahulKalekar
k8s.yaml	Just now	5711ce95 first commit RahulKalekar
mvnw	Just now	5711ce95 first commit RahulKalekar
mvnw.cmd	Just now	5711ce95 first commit RahulKalekar

ENG IN 14:21 10-03-2025

```
C:\Windows\System32\cmd.e x + v

create mode 100644 Dockerfile
create mode 100644 k8s.yaml
create mode 100644 mvnw
create mode 100644 mvnw.cmd
create mode 100644 pom.xml
create mode 100644 pom.xml~
create mode 100644 src/main/java/com/calapp/CalappApplication.java
create mode 100644 src/main/java/com/calapp/controller/NumericController.java
create mode 100644 src/main/resources/application.properties
create mode 100644 src/test/java/com/calapp/CalappApplicationTests.java
create mode 100644 src/test/java/com/calapp/controller/NumericControllerTest.java
create mode 100644 src/test/java/com/calapp/controller/NumericControllerTest.java~

C:\Users\rahul.kalekar\Desktop\lab exam azure\calapp>git push -u origin master
Enumerating objects: 31, done.
Counting objects: 100% (31/31), done.
Delta compression using up to 22 threads
Compressing objects: 100% (24/24), done.
Writing objects: 100% (31/31), 11.42 KiB | 2.85 MiB/s, done.
Total 31 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Analyzing objects... (31/31) (5 ms)
remote: Validating commits... (1/1) done (0 ms)
remote: Storing packfile... done (68 ms)
remote: Storing index... done (33 ms)
remote: We noticed you're using an older version of Git. For the best experience, upgrade to a newer version.
To https://dev.azure.com/rahul471/rahul-1/_git/rahul-1
 * [new branch] master -> master
branch 'master' set up to track 'origin/master'.

C:\Users\rahul.kalekar\Desktop\lab exam azure\calapp>
```

Created dev and test

```
C:\Users\rahul.kalekar\Desktop\lab exam azure\calapp>git checkout -b test
Switched to a new branch 'test'

C:\Users\rahul.kalekar\Desktop\lab exam azure\calapp>git push -u origin test
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote: We noticed you're using an older version of Git. For the best experience, upgrade to a newer version.
To https://dev.azure.com/rahul471/rahul-1/_git/rahul-1
 * [new branch]      test -> test
branch 'test' set up to track 'origin/test'.

C:\Users\rahul.kalekar\Desktop\lab exam azure\calapp>git checkout -b dev
Switched to a new branch 'dev'

C:\Users\rahul.kalekar\Desktop\lab exam azure\calapp>git push -u origin dev
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote: We noticed you're using an older version of Git. For the best experience, upgrade to a newer version.
To https://dev.azure.com/rahul471/rahul-1/_git/rahul-1
 * [new branch]      dev -> dev
branch 'dev' set up to track 'origin/dev'.

C:\Users\rahul.kalekar\Desktop\lab exam azure\calapp>
```

Created pipeline

The screenshot shows the Azure DevOps web interface. The left sidebar contains navigation links: Overview, Boards, Repos, Pipelines (selected), Environments, Library, Test Plans, and Artifacts. The main area is titled 'Pipelines' and shows a table of 'Recently run pipelines'.

Pipeline	Last run
<div>✓</div> rahul-1	#20250310.5 • Update azure-pipelines.yml for Azure... ⚙ Manually triggered for master ⌚ 3m ago ⌚ 56s

The bottom of the screen shows a Windows taskbar with various application icons and a system tray indicating the time as 14:40 on 10-03-2025.

Script

trigger:

branches:

include:

- main
- dev
- test

pool:

vmImage: 'ubuntu-latest'

steps:

- task: JavaToolInstaller@0

inputs:

```
versionSpec: '17'  
jdkArchitectureOption: 'x64'  
jdkSourceOption: 'PreInstalled'
```

- task: Maven@3

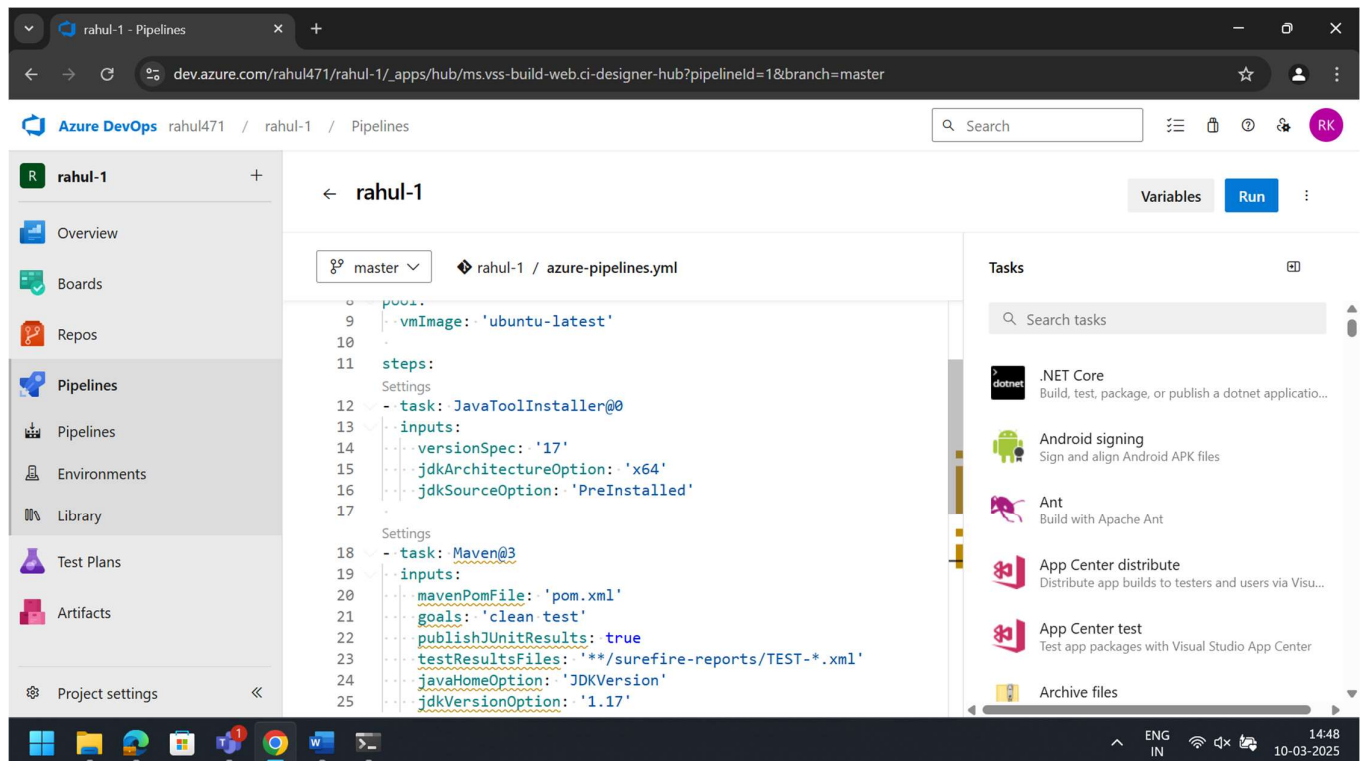
inputs:

```
mavenPomFile: 'pom.xml'  
goals: 'clean test'  
publishJUnitResults: true  
testResultsFiles: '**/surefire-reports/TEST-*.xml'  
javaHomeOption: 'JDKVersion'  
jdkVersionOption: '1.17'
```

- task: PublishCodeCoverageResults@1

inputs:

```
codeCoverageTool: 'JaCoCo'  
summaryFileLocation: '**/site/jacoco/jacoco.xml'  
reportDirectory: '**/site/jacoco'
```



Run pipeline

Pipelines - Run 20250310.5 log

dev.azure.com/rahu471/rahu471/_build/results?buildId=5&view=logs&j=12f1170f-54f2-53f3-20dd-22fc7dff55f9&t=bf0bec29-a116-597f-248a-3df73e73f0a3

Azure DevOps rahu471 / rahu471 / Pipelines / rahu471 / 20250310.5

rahu471

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Jobs in run #20250310.5 rahu471

Jobs

Job	52s
Initialize job	6s
Checkout rahu471...	1s
JavaToolInstaller	<1s
Maven	39s
PublishCodeCov...	4s
Post-job: Check...	<1s
Finalize Job	<1s
Report build sta...	<1s

JavaToolInstaller

View raw log

```
1 Starting: JavaToolInstaller
2 =====
3 Task      : Java tool installer
4 Description: Acquire a specific version of Java from a user-supplied Azure blob or the tool cache an
5 Version   : 0.247.3
6 Author    : Microsoft Corporation
7 Help      : https://docs.microsoft.com/azure/devops/pipelines/tasks/tool/java-tool-installer
8 =====
9 Use preinstalled JDK from /usr/lib/jvm/temurin-17-jdk-amd64
10 JAVA_HOME is being set to: /usr/lib/jvm/temurin-17-jdk-amd64
11 JAVA_HOME_17_X64 is being set to: /usr/lib/jvm/temurin-17-jdk-amd64
12 Prepending PATH environment variable with directory: /usr/lib/jvm/temurin-17-jdk-amd64/bin
13 Finishing: JavaToolInstaller
```

Windows taskbar: 14:38 10-03-2025

Tests passed

Pipelines - Run 20250310.7

dev.azure.com/rahu471/rahu471/_build/results?buildId=7&view=ms.vss-test-web.build-test-results-tab

Azure DevOps rahu471 / rahu471 / Pipelines / rahu471 / 20250310.7

rahu471

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#20250310.7 • Update azure-pipelines.yml for Azure Pipelines final

Run new

This run is being retained as one of 3 recent runs by master (Branch). View retention leases

Summary Tests Code Coverage

Summary

1 Run(s) Completed (1 Passed, 0 Failed)

Total tests: 4 (4 Passed, 0 Failed, 0 Others)

Pass percentage: 100%

Run duration: 7s 423ms

Tests not reported: 0

Bug Link

Test run Column Options

Tags Test file Owner Aborted (+1)

Windows taskbar: 14:51 10-03-2025

Jacoco code coverage

Pipelines - Run 20250310.5

dev.azure.com/rahul471/rahul-1/_build/results?buildId=5&view=codecoverage-tab

Azure DevOps rahul471 / rahul-1 / Pipelines / rahul-1 / 20250310.5

rahul-1

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#20250310.5 • Update azure-pipelines.yml for Azure Pipelines

Run new

This run is being retained as one of 3 recent runs by master (Branch).

View retention leases

SummaryTestsCode Coverage

Sessions calapp

calapp

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed Cxty	Missed Lines	Missed Methods	Missed Classes			
com.calapp.controller		100%		100%	5	0	9	0	4	0	2
Total	0 of 28	100%	0 of 2	100%	5	0	9	0	4	0	2

Created with JaCoCo 0.8.8.202204050719

14:39

10-03-2025