

## EX NO 6

## CREATE A MAVEN BUILD PIPELINE IN AZURE

### AIM:

To create a maven build pipeline in microsoft azure.

### PROCEDURE:

Step 1: In Microsoft azure(pipeline) [open it in incognito mode]

Step 2: Search for **azure devops organisation**

Step 3: Click my azure devops organisation

Step 4: Create new organisation

Step 5: Create project

Step 6: Go for pipeline ->create pipeline

Step 7: Connect ->github

Step 8: Select ->repo

Step 9: Configure ->maven

Step 10: Change the below line (in review)according the version of java you have( if java version is 21 then alter it as '1.21')

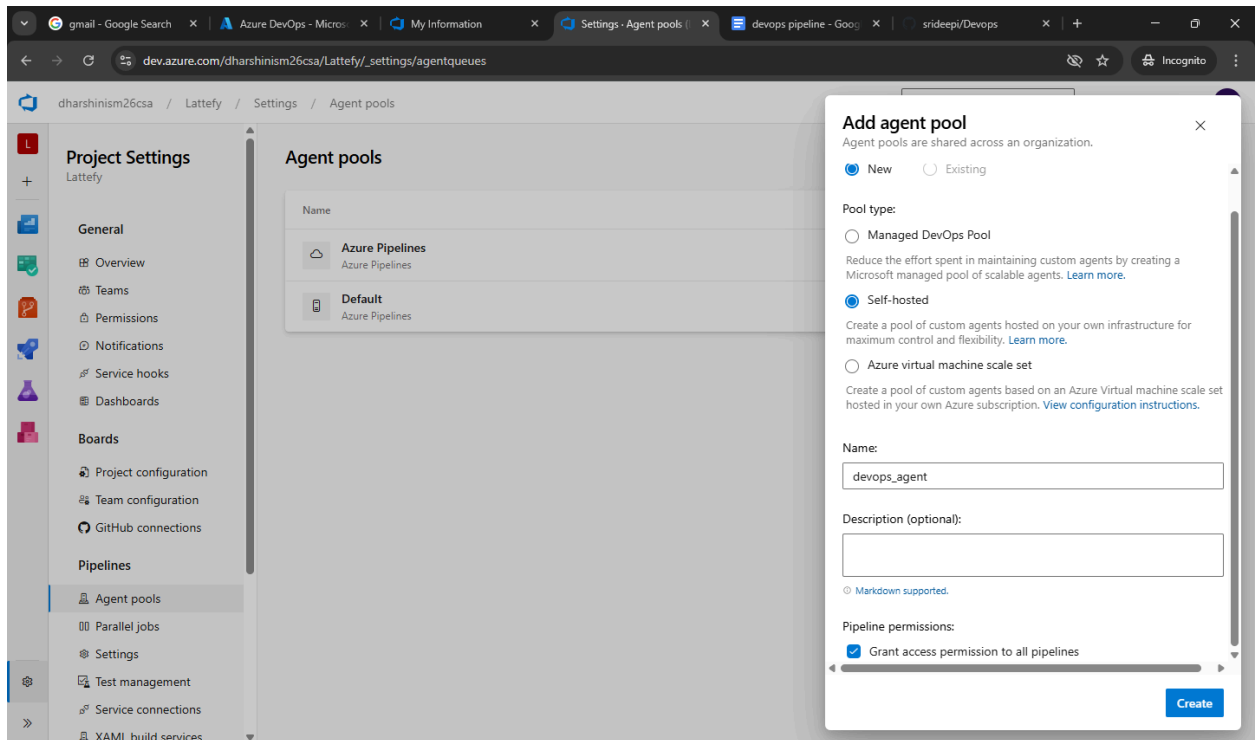
`jdkVersionOption: '1.21'`

`goals: 'package -DskipTests'`

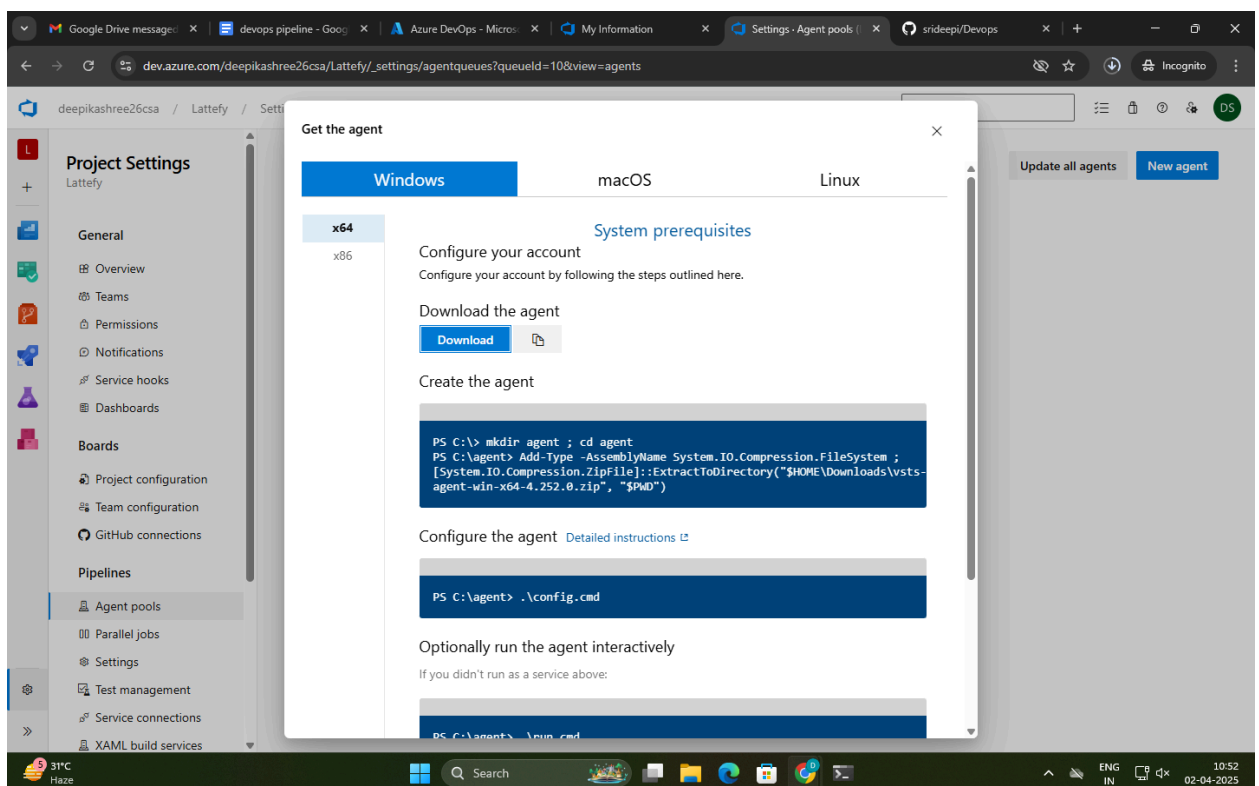
Step 11: Save and run

Step 12: To create agent pool,

1. Project settings->agent pool->add pool



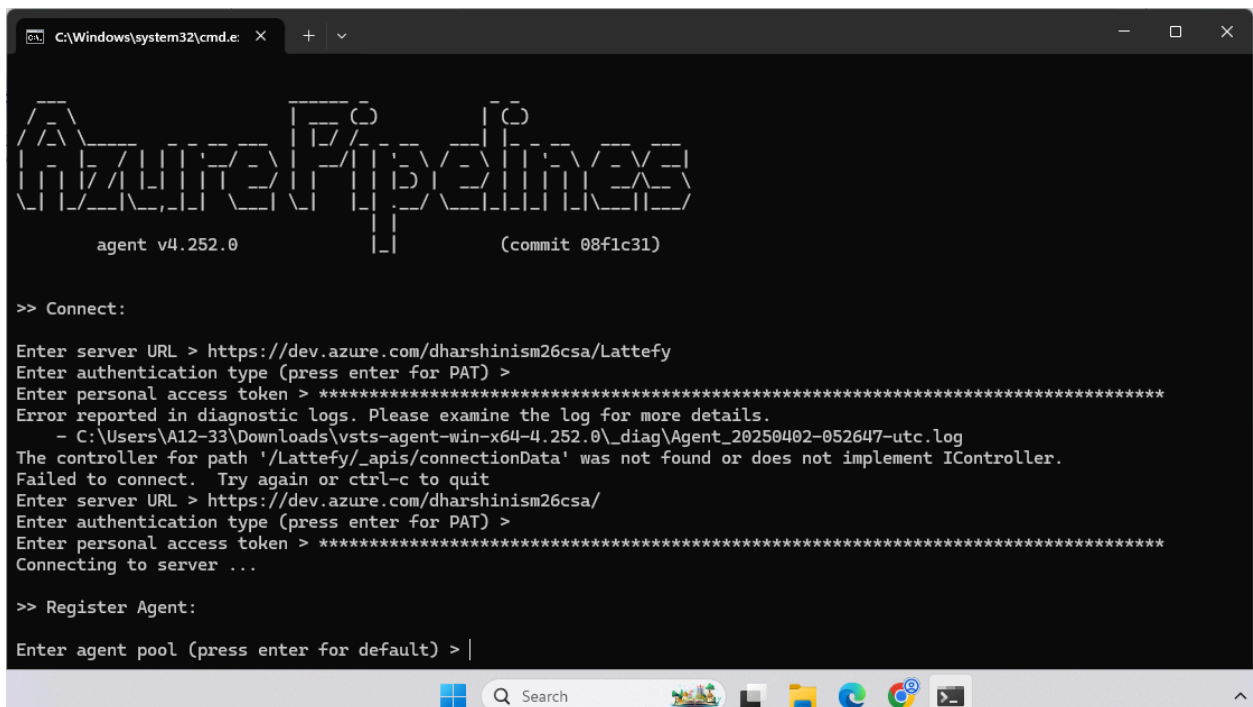
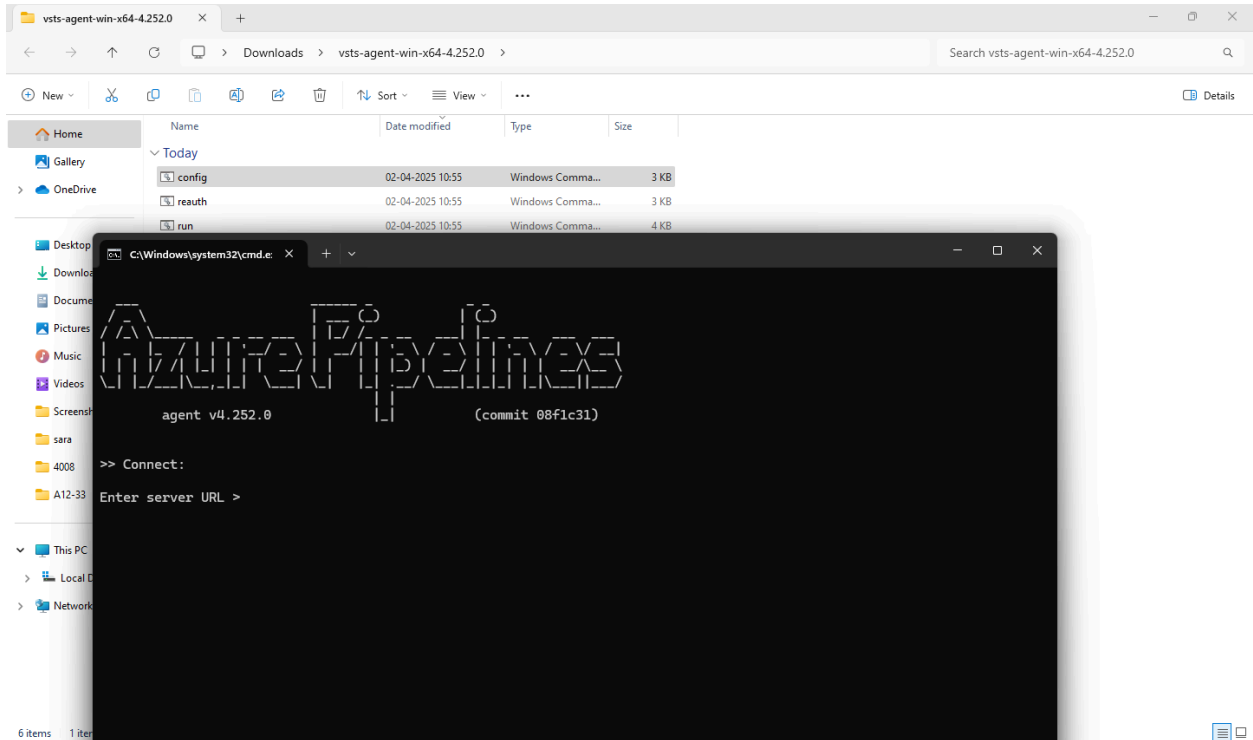
Step 13: To create new agent,  
1. Click new agent



Step 14: Click the download option where a zip file will be downloaded,

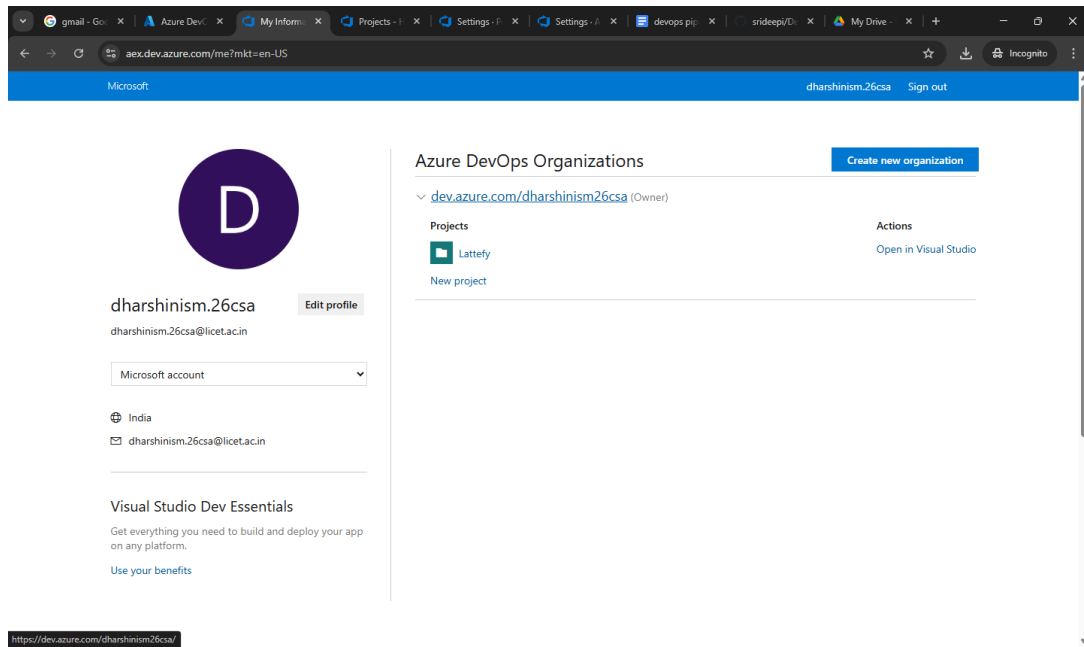
1. Extract the same

2. After extracting ,click the config file

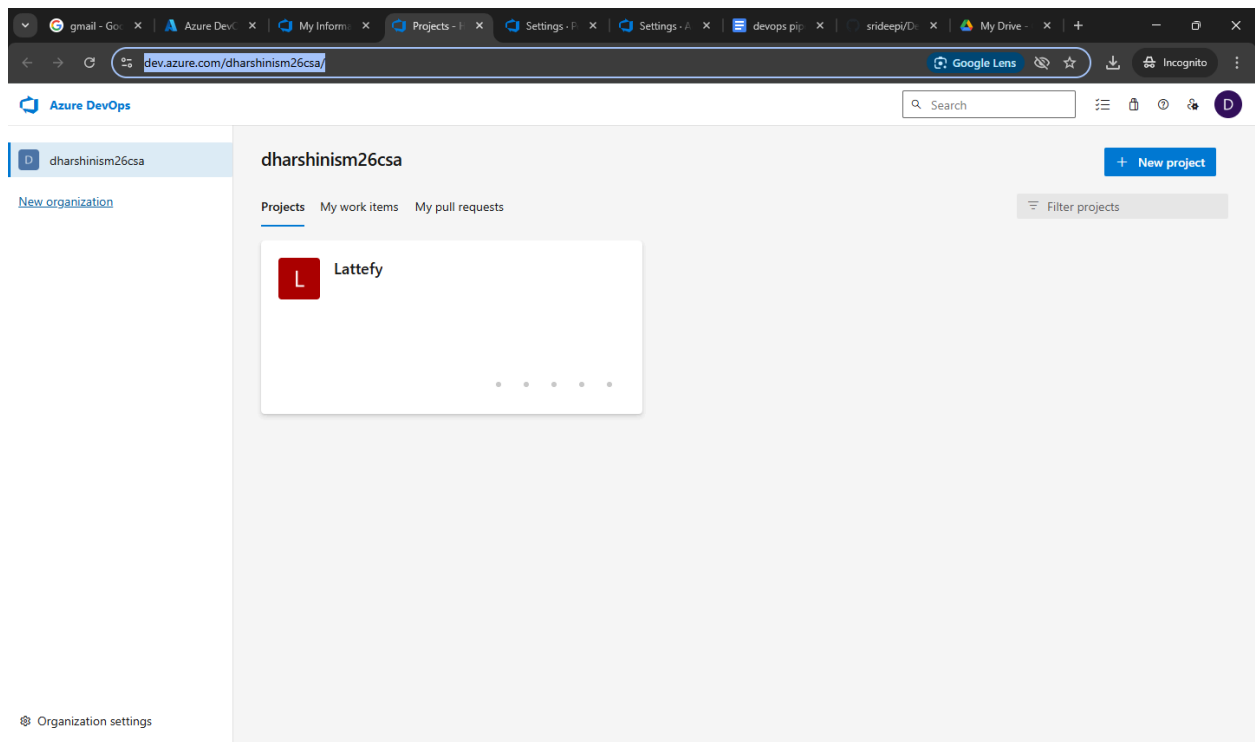


Step 15: For enter server url,

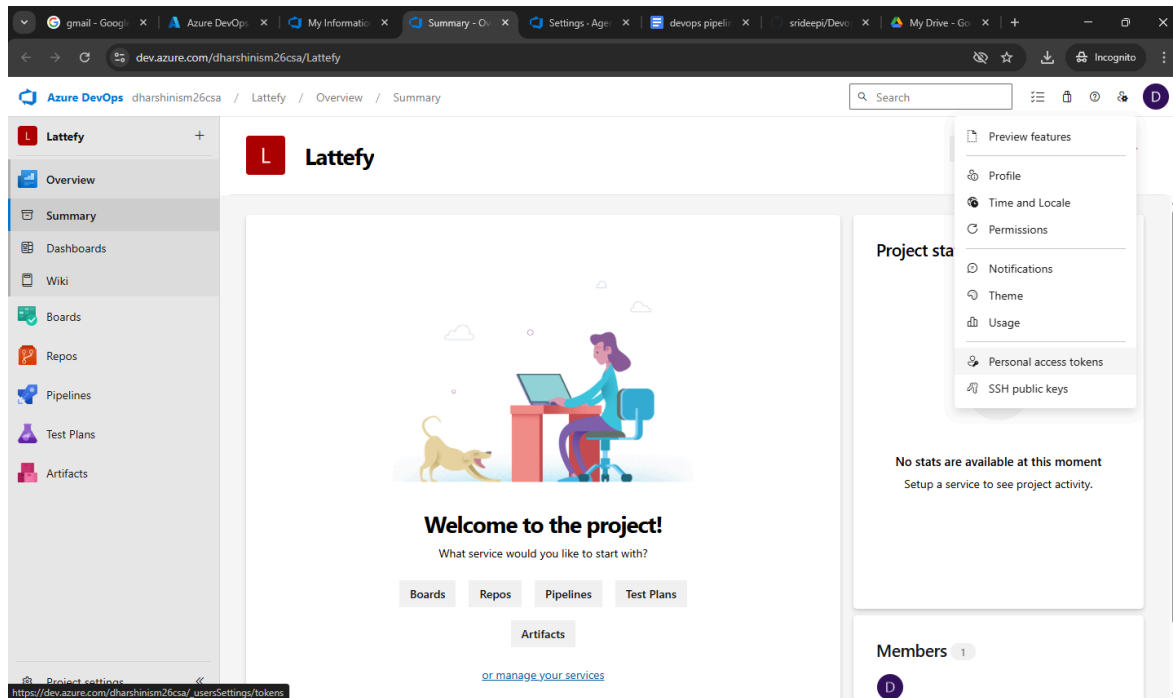
1. Go to My information->click on dev.azure.com/dharshinism.26cscs



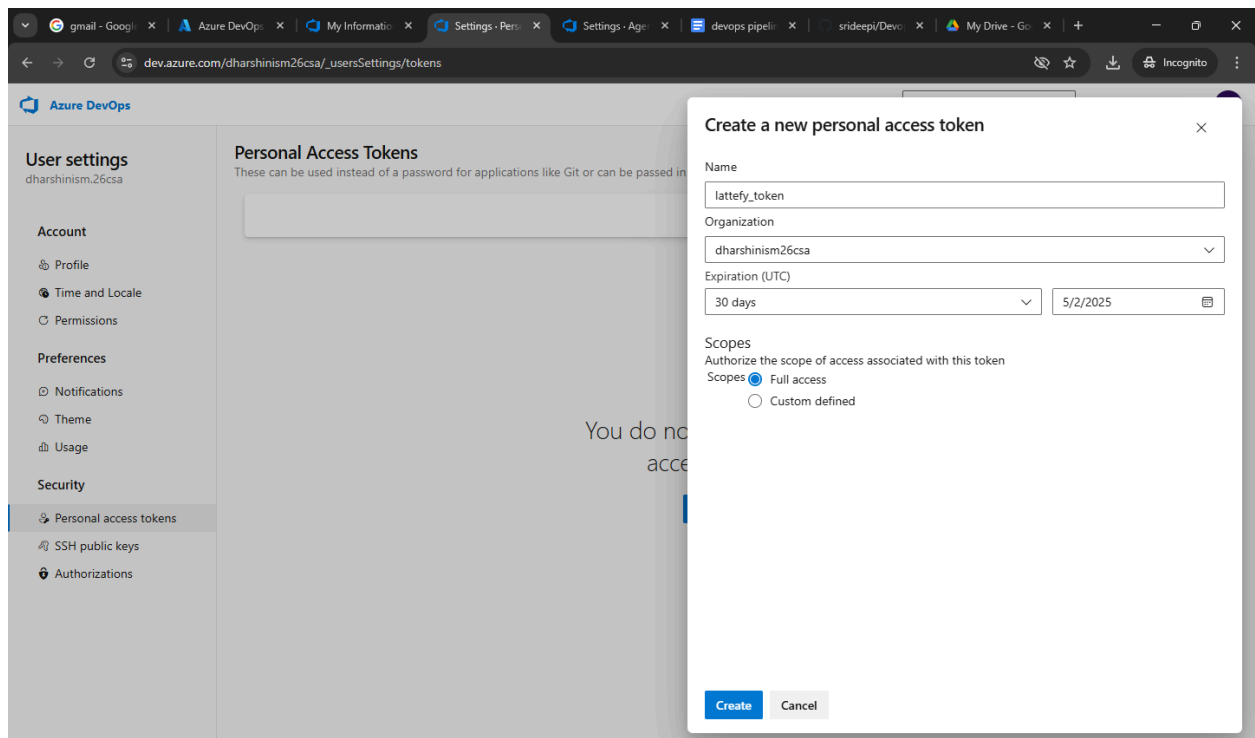
Step 16: Copy and paste the path present above



Step 17: For enter authentication type (first click enter) ,then follow the below steps  
1. Go to user settings->personal access tokens



Step 18: Create new token



Step 19: Copy the token id (don't forget) - It shows only once , so copy it for future reference.

The screenshot shows the Azure DevOps web interface. The left sidebar contains 'User settings' for 'dharshinism26csa' with sections for Account, Preferences, and Security. The 'Personal access tokens' option is selected under Security. The main area is titled 'Personal Access Tokens' and includes a 'Manage tokens' table. A modal window titled 'Success!' is open, displaying the message: 'You have successfully added a new personal access token. Copy the token now! lattefy\_dev\_token token'. Below this, the token 'DRPeWW8Qz4pNF80mfq' is shown in a text box. A warning message states: 'Warning - Make sure you copy the above token now. We don't store it and you will not be able to see it again.' A 'Close' button is at the bottom right of the modal.

Token name	Organization
<input type="checkbox"/> lattefy_token Full access	dharshinism26csa
<input type="checkbox"/> lattefy_dev_token Full access	dharshinism26csa

Step 20: Enter the copied token id

```
C:\Windows\system32\cmd.e X + v

Azure Pipelines
agent v4.252.0 (commit 08f1c31)

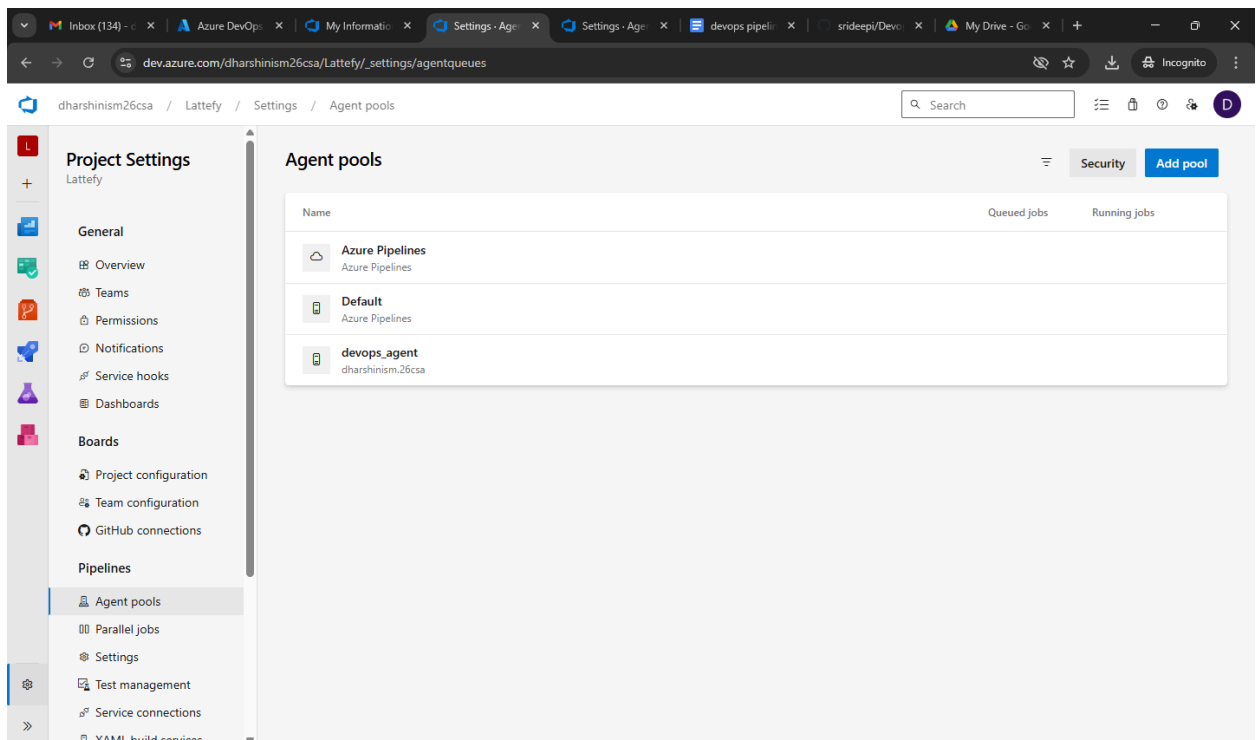
>> Connect:

Enter server URL > https://dev.azure.com/dharshinism26csa/Lattefy
Enter authentication type (press enter for PAT) >
Enter personal access token > *****
Error reported in diagnostic logs. Please examine the log for more details.
- C:\Users\A12-33\Downloads\vsts-agent-win-x64-4.252.0\_diag\Agent_20250402-052647-utc.log
The controller for path '/Lattefy/_apis/connectionData' was not found or does not implement IController.
Failed to connect. Try again or ctrl-c to quit
Enter server URL > https://dev.azure.com/dharshinism26csa/
Enter authentication type (press enter for PAT) >
Enter personal access token > *****
Connecting to server ...

>> Register Agent:

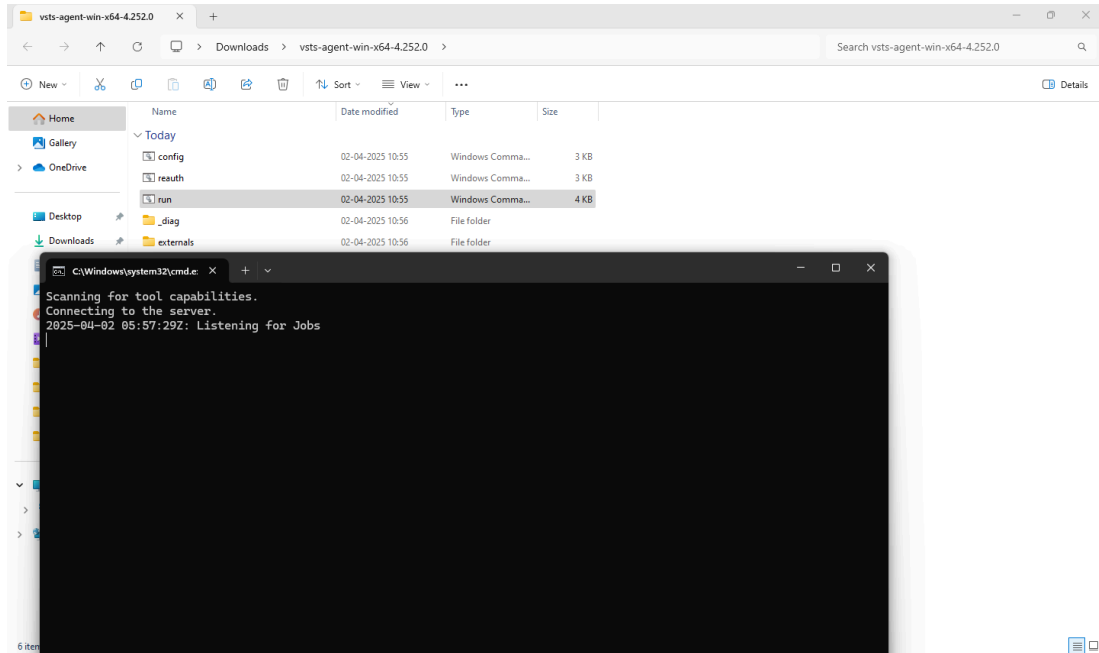
Enter agent pool (press enter for default) > |
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Step 21: Enter the name of the agent pool



a. enter agent name (your choice)

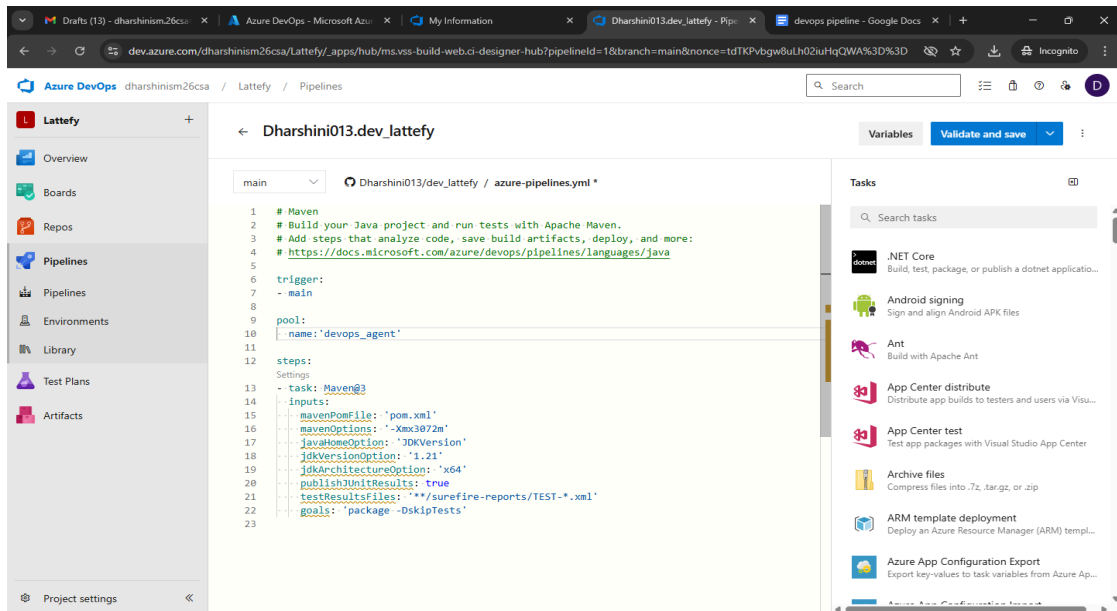
- b. press enter->y-> y
- c. now enter the extracted folder present in the local ,
- d. Enter run file



(Note: dont close the run command prompt -just minimise it)

Step 22: Go to azure ->enter into the created pipeline

- 1. Click on to the three dots present in the top right corner->edit pipeline





## Step 23: Add maven's bin in job -> capabilities

The screenshot shows the 'Capabilities' tab for the 'lattefy' agent pool. The left sidebar contains 'Project Settings' with a sub-menu for 'Agent pools'. The main content area is divided into 'User-defined capabilities' and 'System capabilities'.

**User-defined capabilities**

Name	Value
maven	C:\Program Files\apache-maven-3.9.9\bin

**System capabilities**

Name	Value
Agent.Name	lattefy
Agent.Version	4.252.0
Agent.ComputerName	DESKTOP-2R7QQAF
Agent.HomeDirectory	C:\Users\A12-33\Downloads\ysts-agent-win-x64-4.252.0 (1)
Agent.OS	Windows_NT
Agent.OSArchitecture	X64
Agent.OSVersion	10.0.22631
ALLUSERSPROFILE	C:\ProgramData

## Step 24: Update the agent by clicking the three dots

The screenshot shows the 'Agents' tab for the 'devops\_agent' pool. The left sidebar is the same as in Step 23. The main content area shows a table of agents.

**devops\_agent**

Update all agents New agent

Name	Last run	Current status	Agent version	Enabled
lattefy Online	Now	Running build 20250402.3	4.252.0	On

More options

Step 25: Again go to pipeline ->validate and run

1. Job runs with a success message

The screenshot displays the Azure DevOps web interface. On the left, a sidebar contains navigation links: Overview, Boards, Repos, Pipelines (selected), Environments, Library, Test Plans, and Artifacts. The main area is titled 'Jobs in run #20250402.5' for the 'srideepi.Devops' pipeline. It shows a list of jobs, all of which are completed successfully (indicated by green checkmarks). The jobs are: Initialize job (1s), Checkout srideepi/De... (43s), Maven (49s), Post-job: Checkout sri... (<1s), and Finalize Job (<1s). On the right, a detailed view of a job is shown, starting with a green checkmark and the title 'Job'. It lists the pool as 'devops\_agent', the agent as 'Lattefy', and the duration as '1m 35s'. The job preparation parameters are expanded, showing a list of commands and their execution status. The commands are: 'Job live console data:', 'Async Command Start: WindowsPreinstalledGitTelemetry', 'Async Command End: WindowsPreinstalledGitTelemetry', 'Async Command Start: WindowsPreinstalledGitTelemetry', 'Async Command End: WindowsPreinstalledGitTelemetry', 'Async Command Start: WindowsPreinstalledGitTelemetry', 'Async Command End: WindowsPreinstalledGitTelemetry', 'Async Command Start: WindowsPreinstalledGitTelemetry', 'Async Command End: WindowsPreinstalledGitTelemetry', and 'Finishing: Job'. The bottom of the screen shows a Windows taskbar with the search bar, task view button, and several application icons. The system tray on the right shows the date and time as '12:22 02-04-2025'.

Job	Duration
Initialize job	1s
Checkout srideepi/De...	43s
Maven	49s
Post-job: Checkout sri...	<1s
Finalize Job	<1s

```
1 Pool: devops_agent
2 Agent: Lattefy
3 Started: Just now
4 Duration: 1m 35s
5
6 Job preparation parameters
41 Job live console data:
42 Async Command Start: WindowsPreinstalledGitTelemetry
43 Async Command End: WindowsPreinstalledGitTelemetry
44 Async Command Start: WindowsPreinstalledGitTelemetry
45 Async Command End: WindowsPreinstalledGitTelemetry
46 Async Command Start: WindowsPreinstalledGitTelemetry
47 Async Command End: WindowsPreinstalledGitTelemetry
48 Async Command Start: WindowsPreinstalledGitTelemetry
49 Async Command End: WindowsPreinstalledGitTelemetry
50 Finishing: Job
```

## RESULT:

Thus the maven build pipeline is created in azure and the job is executed successfully.