**Steps to install Jenkins in WSL2 and configure.**

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**Assignment 2**

Part 1

Step 1

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Step 2

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Step 3

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Step 4

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Step 5

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**Assignment 2**

Part 2

1. Prerequisites:

Ensure that Jenkins is set up and configured properly on your server.

Install any necessary plugins for .NET support (e.g., MSBuild, .NET Core SDK).

Have your .NET project's source code available in a Git repository.

1. Create a Jenkins Pipeline:

In Jenkins, go to the dashboard and click on "New Item" or "Create a new job."

Enter a name for your pipeline, e.g., "DotNetBuildAndTestPipeline."

Select "Pipeline" as the job type.

Click "OK" to create the pipeline.

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1. Configure the Pipeline:

In the pipeline configuration page, scroll down to the "Pipeline" section, and choose the "Pipeline script from SCM" option. This allows you to define your pipeline using a Jenkinsfile stored in your Git repository.

Under "SCM," select Git and provide the Git repository URL where your .NET project code is hosted. You may need to configure Git credentials if your repository is private.

Specify the branch or tag you want to build from.

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1. Create a Jenkinsfile:

In .NET project's repository, create a file named "Jenkinsfile" (without quotes) in the root directory.

Open the Jenkinsfile in a text editor and define your pipeline stages and steps. Here's a simple example:

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This Jenkinsfile defines three stages: Checkout (to fetch the source code), Build (to build the project), and Test (to run tests).

1. Save and Commit:

Save the Jenkinsfile in your Git repository.

Commit and push the changes to your Git repository.

1. Trigger the Pipeline:

Go back to your Jenkins dashboard and find your newly created pipeline.

Click on the pipeline and select "Build Now" to trigger the pipeline manually.

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1. Monitor the Build:

Jenkins will start executing the pipeline stages automatically.

You can monitor the progress and view the build console output for any errors or issues.

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