**Plugins required to build project:**

1. jdk (give all java version to install)

2. Eclios Temurin Installer(give all java version to install)

4.SonarQube Scanner

4. owasp dependecny check ==> used to check project dependency

5. docker

6. docker pipeline

7. docker build steps

8. kubernetes

9.kubernetes CLI

10. kubernetes Pipeline

9. Jfrog

10. Extended Choice Parameter plugins in

**Plugin to read properties file** : It is used to read external properties file.

=>Pipeline

=>Pipeline Utility Steps



2.

def readProps = [:]  
  
pipeline {  
 agent any  
  
 stages {  
 stage('Read Properties File') {  
 steps {  
 script{  
 readProps = readProperties *file*: 'build.properties'  
 }  
 echo "\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*"  
 echo "properties - build number : ${readProps['jenkins.owner.name']}"  
 echo "properties - build number : ${readProps['jenkins.build.number']}"  
 echo "\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*"  
  
 }  
 }  
 }  
}

Note: If build is failing due to maven not found, sonar not found or any other then first installed all above plugins and then setup configuration from tools section.

Once you setup configuration then while build you will show all tool will dpwnloading and work accordingly.

**JDK setup: plugins required(jdk and** Eclios Temurin Installer**)**

**Sonarqube scanner setup**: plugins required(SonarQube Scanner)

**Maven setup:** plugins required(maven, maven pipeline, maven integration)

**SonarQube server setup:** this option if not visible then we need to install Sonarqube Scanner plugin