Integration of all the tools:

* Create an EC2 instance → Name it as; “jenkins”.
* Select the instance type as t2.medium → Select the all traffic and Launch an instance.
* Now go to the Security group → Edit the inbound rules → edit it to the All traffic and source to the: ‘Anywhere IPV4”.
* Connect to the Git bash using SSH client.
* Execute “sudo su”
* Install the java in that instance “sudo dnf install -y java-17-amazon-corretto”
* Install the git using “yum install -y git”
* Install the maven. To install the maven there are mainly 3 - commands:
  + “sudo wget http://repos.fedorapeople.org/repos/dchen/apache-maven/epel-apache-maven.repo -O /etc/yum.repos.d/epel-apache-maven.repo”
  + “sudo sed -i s/\$releasever/6/g /etc/yum.repos.d/epel-apache-maven.repo”
  + “sudo yum install -y apache-maven”
* In Order to check whether the Maven installed successful check the for the version “mvn –version”
* Check the version of the java “java -version’ if the version is 17 it’s fine. If not execute “sudo alternatives --config java” and u will get the option choose the appropriate option.(Java 17 supports Jenkins but not the 23).
* Now let’s install the jenkins “sudo rpm --import <https://pkg.jenkins.io/redhat-stable/jenkins.io.key>”
* Execute “sudo amazon-linux-extras install epel -y” → if it is the “sudo: amazon-linux-extras: command not found” → “sudo: amazon-linux-extras: command not found” → Failed to restart jenkins.service: Unit jenkins.service not found → “sudo systemctl status jenkins” → Unit jenkins.service could not be found → “sudo journalctl -xeu jenkins.service | tail -50” → -- No entries --
* Now install nginx “sudo yum install nginx” → Is this ok [y/N]: y → u have installed the nginx server.
* Install the jenkins “yum install jenkins -y”
* Execute “sudo rpm --import https://pkg.jenkins.io/redhat/jenkins.io-2023.key”
* Execute ‘ rpm -q gpg-pubkey --qf "%{NAME}-%{VERSION}-%{RELEASE} %{SUMMARY}\n" ‘
* Execute “sudo systemctl enable jenkins”
* Execute “sudo systemctl start jenkins”
* Execute “sudo systemctl status jenkins”
* Go to the instance → copy Public address into the chrome with extension 8080 and run → u will get the administrator password.
* Inorder to get the password Execute “cat /var/lib/jenkins/secrets/initialAdminPassword” in the git bash → copy the password without the blank spaces → and paste it in the administrator password in the tab.
* U will get the 2 tabs → select the “install the suggested the plugins” → create the user login credentials → now save and finish.
* U will get the dashboard of jenkins.