Installation:

Git:
sudo apt-get install git
git init
git clone https://github.com/venessa-roshni/Assignment.git

Maven:
sudo apt-get install maven

Java:
sudo add-apt-repository ppa:webupd8team/java
sudo apt-get update
sudo apt-get install oracle-java7-installer

Jenkins:
wget -q -O - https://pkg.jenkins.io/debian/jenkins-ci.org.key | sudo apt-key add -
sudo sh -c 'echo deb http://pkg.jenkins.io/debian-stable binary/ >
/etc/apt/sources.list.d/jenkins.list'
sudo apt-get update
sudo apt-get install jenkins

MySQL:
sudo apt-get install mysql-server

Username: root
Password: root

Tomcat:
 sudo apt-get install tomcat7

/var/lib/tomcat7/conf/server.xml (changed port since jenkins runs on 8080)

In the tomcat-users.xml add the following line
<user username="deployer" password="deployer" roles="manager-script" />
This allows jenkins to deploy the war in tomcat.

Steps to pull the code from git and build and deploy automatically using Jenkins:

To clone repository:
  git clone https://github.com/venessa-roshni/simple-restlet.git

To connect to database and create new database and tables:
  mysql -u root -p < create.sql

Connecting to Jenkins:

http://52.66.124.172:8080
Username:venessa
Password: venessa

To create a new job: Jenkins configurations

1)To checkout code from git
  - Source code management :
    - Select git
    - Enter Repository url
2) To maven build
  - Build : Invoke top-level maven targets
    - Goals: clean install
3) To deploy on tomcat
  - Post build actions:
    - Deploy war/ear to container
    - War files:**/target/*.war
    - Containers: tomcat 7.x
    - Manager : Enter username: deployer , Password: deployer
    - Tomcat url

Jenkins : port - 8080
Tomcat : port - 8083

Curl command to test API:
curl -i -v -X POST http://localhost:8083/simple-restlet/hello --header "Content-Type:application/json" -d {"greeting":"hello"}

Architecture: