1. Get war file

```
osgdev@TG-DevOps-OS144:~$ ls Downloads/
7WXOQKL6.html
geckodriver-v0.19.1-linux64.tar.gz
jfrog-artifactory-oss-5.9.0-sources.tar.gz
jfrog-artifactory-pro-5.9.0(1).zip
jfrog-artifactory-pro-5.9.0.zip
mariadb-10.2.14-linux-x86_64.tar.gz
mongodb-linux-x86_64-ubuntu1604-3.6.4.tgz
MyWebIntegration.war
node-v8.11.1-linux-x64.tar.xz
sonarqube-6.4.zip
sonarqube-6.7.2.zip
```

2. Get Tomcat tar file

```
osgdev@TG-DevOps-OS144:~/ansilab$ ls /home/osgdev/myDownloads/
apache-tomcat-7.0.82.tar.gz                gedit_3.10.4-
0ubuntu4_amd64.deb
apache-tomcat-8.5.27-src.tar.gz            jenkins.tar
apache-tomcat-8.5.27.tar.gz                jenkins.war
eclipse-inst-linux64.tar.gz                uex-16.1.0.22_amd64.tar.gz
eclipse-jee-oxygen-2-linux-gtk-x86_64.tar.gz
```

3. Create working directory:

```
osgdev@TG-DevOps-OS144:~/ansilab$ mkdir tomcat
```

4. Create server.xml.j2 file with specific change in port:

```
osgdev@TG-DevOps-OS144:~/ansilab$ vi server.xml.j2
```

5. Check for any running tomcat servers and shutdown them to avoid conflict:

```
osgdev@TG-DevOps-OS144:~/ansilab/apache-tomcat-8.5.27/bin$ ./shutdown.sh
osgdev@TG-DevOps-OS144:~/ansilab/apache-tomcat-7.0.82/bin$ ./shutdown.sh
```

6. Create Tomcat Role:

```
osgdev@TG-DevOps-OS144:~/ansilab$ ansible-galaxy init ./roles/tomcat
- ./roles/tomcat was created successfully
```

7. Copy tar file into /files folder

```
osgdev@TG-DevOps-OS144:~/ansilab$ cp /home/osgdev/myDownloads/apache-
tomcat-8.5.27.tar.gz /home/osgdev/ansilab/roles/tomcat/files/

osgdev@TG-DevOps-OS144:~/ansilab$ ls
/home/osgdev/ansilab/roles/tomcat/files/
apache-tomcat-8.5.27.tar.gz
```

8. Copy server.xml.j2 file into /templates folder

```
osgdev@TG-DevOps-OS144:~/ansilab$ cp /home/osgdev/ansilab/server.xml.j2
/home/osgdev/ansilab/roles/tomcat/templates/

osgdev@TG-DevOps-OS144:~/ansilab$ ls
/home/osgdev/ansilab/roles/tomcat/templates/server.xml.j2
```

9. Write tomcat playbook

```
osgdev@TG-DevOps-OS144:~/ansilab$ cat ./roles/tomcat/tomcat.yml
- hosts: localhost
  roles:
  - tomcat
```

10. Write tomcat role

```
osgdev@TG-DevOps-OS144:~/ansilab$ cat ./roles/tomcat/tasks/main.yml
---
# tasks file for ./roles/tomcat
  - name: Extract tomcat tar file
    unarchive:
       src: apache-tomcat-8.5.27.tar.gz
       dest: /home/osgdev/ansilab/tomcat

  - name: Change the tomcat port
    template:
       src: server.xml.j2
       dest: "{{tomcat_home}}/conf/server.xml"
    notify: Start tomcat service


osgdev@TG-DevOps-OS144:~/ansilab$ cat ./roles/tomcat/handlers/main.yml
---
# handlers file for ./roles/tomcat
  - name: Start tomcat service
    shell: "{{tomcat_home}}/bin/startup.sh"


osgdev@TG-DevOps-OS144:~/ansilab$ cat ./roles/tomcat/vars/main.yml
---
# vars file for ./roles/tomcat
tomcat_home: /home/osgdev/ansilab/tomcat/apache-tomcat-8.5.27
```

11.Run the playbook

```
osgdev@TG-DevOps-OS144:~/ansilab$ ansible-playbook
./roles/tomcat/tomcat.yml

PLAY [localhost]
******************************************************************

TASK [Gathering Facts]
*************************************************************
ok: [localhost]

TASK [tomcat : Extract tomcat tar file]
********************************************
changed: [localhost]

TASK [tomcat : Change the tomcat port]
********************************************
changed: [localhost]

RUNNING HANDLER [tomcat : Start tomcat service]
**********************************
```

```
changed: [localhost]

PLAY RECAP
********************************************************************
localhost                    : ok=4    changed=3    unreachable=0
failed=0
```

12.Check availability of Tomcat Server: