Application:

Clone the below mentioned repo and deploy the application. (run the application in port 80 [HTTP])

Repo URL: https://github.com/sriram-R-krishnan/devops-build

Docker:

1 Dockerize the application by creating a Dockerfile

2 create a docker-compose file to use the above image

Bash scripting:

Write 2 scripts

1 build.sh -for building docker images

2 deploy.sh -for deploying the image to server

Version control:

1 Push the code to GitHub to dev branch (use dockerignore & gitignore files)

2 Note: use only CLI for related git commands

Docker hub:

1 create 2 repos “dev” and “prod” to push images.

“prod” repo must be private and “dev” repo can be public

Jenkins:

1 install and configure Jenkins build step as per needs to build, push & deploy the application

2 connect Jenkins to the GitHub repo with auto build trigger from both dev & master branch

3 if code pushed to dev branch, docker image must build and pushed to dev repo in docker hub

4 if dev merged to master, then docker image must be pushed to prod repo in docker hub

AWS:

Launch t2. micro instance and deploy the create application.

Configure SG as below:

- Whoever has the ip address can access the application
- Login to server can should be made only from your ip address

Monitoring:

1 setup a monitoring system to check the health status of the application. (open source)