High Level CodePipeline Setup

1. Navigate to CodeCommit, Developer Tools -> CodeCommit -> Repositories, https://console.aws.amazon.com/codesuite/codecommit/repositories?region=us-east-1
2. Create repository -> Enter Repository Name (Enter the project name, say radtac) -> Create. Upload the code to CodeCommit
3. Navigate to CodePipeline, Developer Tools -> CodePipeline -> Pipelines, https://console.aws.amazon.com/codesuite/codepipeline/pipelines?region=us-east-1. Create pipeline -> Enter Pipeline Name -> Next
4. In Add source stage, Choose AWS CodeCommit in the drop down option for Source provider -> Choose the Repository Name created in Step 3 -> Choose Branch name, considering we are going to use only master -> Next

Output

1. **Nodes**

```
[root@ip-172-31-86-26 infra-exercise-vjsairam]# k get nodes -o wide
NAME                          STATUS   ROLES    AGE   VERSION              INTERNAL-IP   EXTERNAL-IP      OS-IMAGE         KERNEL-VERSION
      CONTAINER-RUNTIME
ip-10-0-4-10.ec2.internal     Ready    <none>   11h   v1.18.9-eks-d1db3c   10.0.4.10     100.24.105.135   Amazon Linux 2   4.14.209-160.339.amzn2.x
86_64   docker://19.3.6
ip-10-0-5-24.ec2.internal     Ready    <none>   11h   v1.18.9-eks-d1db3c   10.0.5.24     34.238.40.246    Amazon Linux 2   4.14.209-160.339.amzn2.x
86_64   docker://19.3.6
ip-10-0-6-123.ec2.internal    Ready    <none>   11h   v1.18.9-eks-d1db3c   10.0.6.123    52.206.180.41    Amazon Linux 2   4.14.209-160.339.amzn2.x
86_64   docker://19.3.6
```

2. **CodeBuild**

radtac:38e715fe-8838-457f-a5bf-d5b18f10dbd4	Succeeded	radtac	7	arn:aws:s3:::codepipeline-us-east-1-843180801426/radtac/SourceArti/TNmxnyD	codepipeline/radtac	1 minute 55 seconds

3. **Deployment**

```
[root@ip-172-31-86-26 infra-exercise-vjsairam]# k get all
NAME                                  READY   STATUS    RESTARTS   AGE
pod/server-demo-658876955b-pjrsq      1/1     Running   0          2m18s
pod/server-demo-658876955b-zxs9x      1/1     Running   0          2m47s

NAME                          TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)          AGE
service/backend-service       NodePort    172.20.5.234    <none>        8080:31479/TCP   11h
service/kubernetes            ClusterIP   172.20.0.1      <none>        443/TCP          11h

NAME                             READY   UP-TO-DATE   AVAILABLE   AGE
deployment.apps/server-demo      2/2     2            2           11h

NAME                                        DESIRED   CURRENT   READY   AGE
replicaset.apps/server-demo-658876955b      2         2         2       2m47s
```

4. **Application Output**

```
[root@ip-172-31-86-26 infra-exercise-vjsairam]# curl 52.206.180.41:31479; echo
Hello form Node.js Server
[root@ip-172-31-86-26 infra-exercise-vjsairam]#
```