**Source code of Setting Up Jenkins Pipeline to Deploy Docker Swarm:-**

**1. Create a Rest Application with two spring projects and build docker images**

**2.Create docker swarm service for the two images with the following steps**

* **Docker swarm init**
* **Copy link generated from manager node to the worker node**
* **Docker stack deploy –c dockerconfig.yaml test**

**dockerconfig.yaml**

version: "3"

services:

  consumer:

    image: saikrishna2001/swarm2

    networks:

      - consumer-producer

    depends\_on:

      - producer

  producer:

    image: saikrishna2001/swarm1

    ports:

      - "8088:8088"

    networks:

      - consumer-producer

**Jenkins pipeline script:**

node{

def buildNumber=BUILD\_NUMBER

stage("Git Clone"){

git branch: 'master', url: 'https://github.com/MithunTechnologiesDevOps/java-web-app-docker.git'

}

stage("Maven clean package"){

def mavenHome= tool name: "Maven-3.8.6", type: "maven"

def mavenCMD="${mavenHome}/bin/mvn"

sh "${mavenCMD} clean package"

}

stage("Build Docker Image"){

sh "docker build -t arvin2906/docker-jenkins:${buildNumber} ."

}

stage("Push Docker Image"){

sh "docker login -u arvin2906 -p Catchemall2803!"

sh "docker push arvin2906/docker-jenkins:${buildNumber} "

}

stage("Deploy Docker service in docker swarm cluster"){

sshagent(['Swarm\_manager']) {

sh "ssh -o StrictHostKeyChecking=no ubuntu@172.31.90.38 sudo docker service rm dockerjenkins || true"

sh "ssh -o StrictHostKeyChecking=no ubuntu@172.31.90.38 sudo docker service create --name dockerjenkins --replicas 2 -p 80:80 httpd "

}

}

}