When we launch a new instance it is internally create a volume and that volume is always associated with this instance. By default the volume is created with 30GB size. Initially the instance is in running state. Each Instance have four states start, stop, terminate, reboot.

If we want to remove the associate volume manually then it is not possible to remove because it is used by the instance. If we stop the instance and again want to remove the volume then now it is possible to remove the volume but after removal if we want to start the instance then the instance will be not start because it is not associated with the volume. If we want we can create the volume and again attach that volume with the instance then we can start that instance.

Creating instance programmatically:

AWSCredentials credentials=null;

try {

credentials=new PropertiesCredentials(InstanceCreation.class.getClassLoader().getResourceAsStream("aws.prop erties"));

} catch (IOException e) {

e.printStackTrace();

}

AmazonEC2Client amazonEC2Client = new AmazonEC2Client(credentials);

amazonEC2Client.setEndpoint("ec2.us-west-2.amazonaws.com");

//Instance creation from AMI

RunInstancesRequest runInstancesRequest = new RunInstancesRequest();

runInstancesRequest.withImageId("ami-25732b15")//ami id

.withInstanceType("t1.micro")

.withMinCount(1)

.withMaxCount(1)

.withKeyName("smishra")//key name should be generated by us

.withSecurityGroups("launch-wizard-20");//existing security groups name

RunInstancesResult runInstancesResult =

amazonEC2Client.runInstances(runInstancesRequest);

Start, Stop and termination of an instance programmatically:

StartInstancesRequest startRequest = new StartInstancesRequest().withInstanceIds("i-e47b3be8");

StartInstancesResult startResult = amazonEC2Client.startInstances(startRequest);

System.out.println("Instance Started. . . ");

StopInstancesRequest stopRequest = new StopInstancesRequest().withInstanceIds("i-e47b3be8");

StartInstancesResult startResult = amazonEC2Client.startInstances(startRequest); System.out.println("Instance Stop. . . ");

TerminateInstancesRequest terminateRequest=new TerminateInstancesRequest().withInstanceIds("i-e47b3be8");

TerminateInstancesResult terminationResult= amazonEC2Client.terminateInstances(terminateRequest); System.out.println("Instance Terminated . . . ");