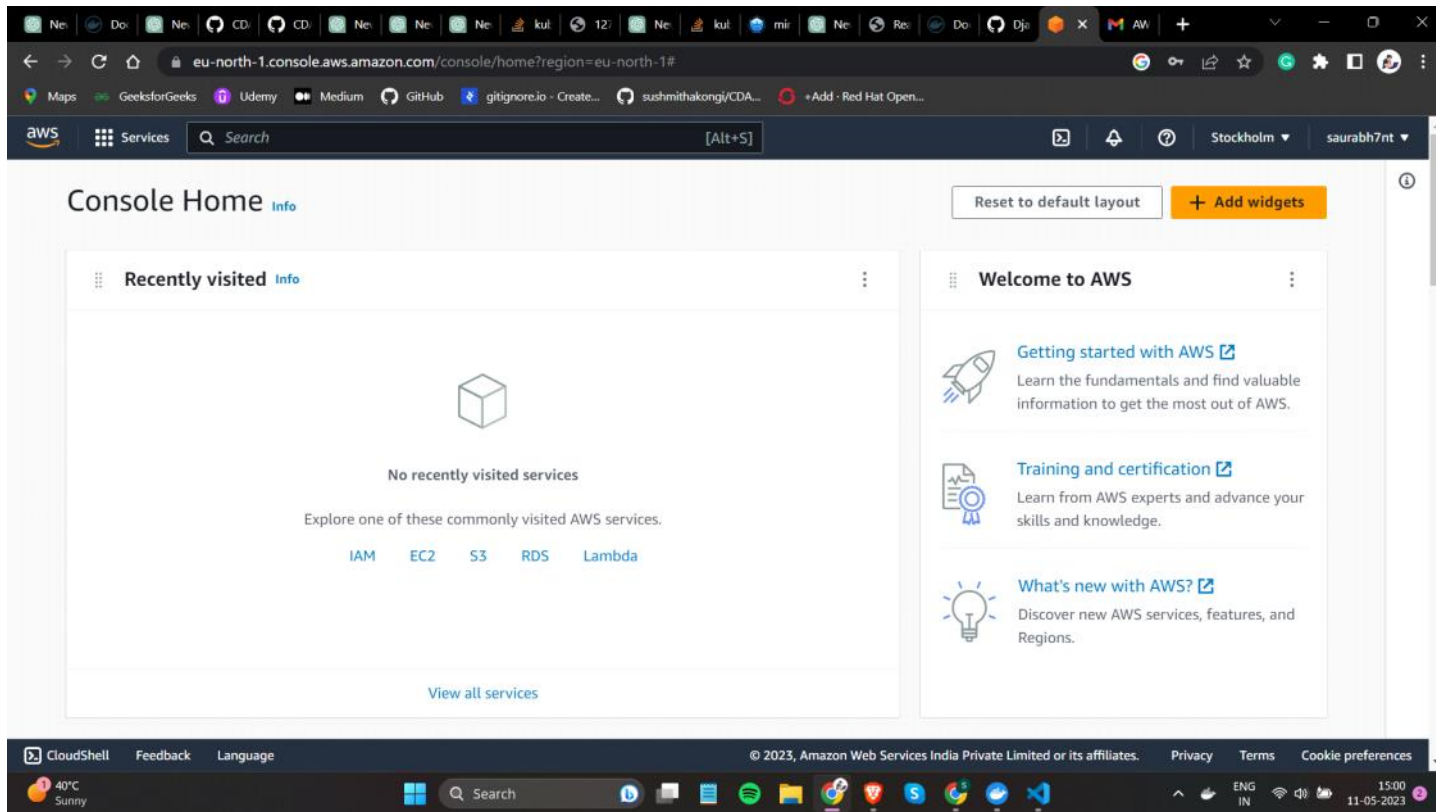
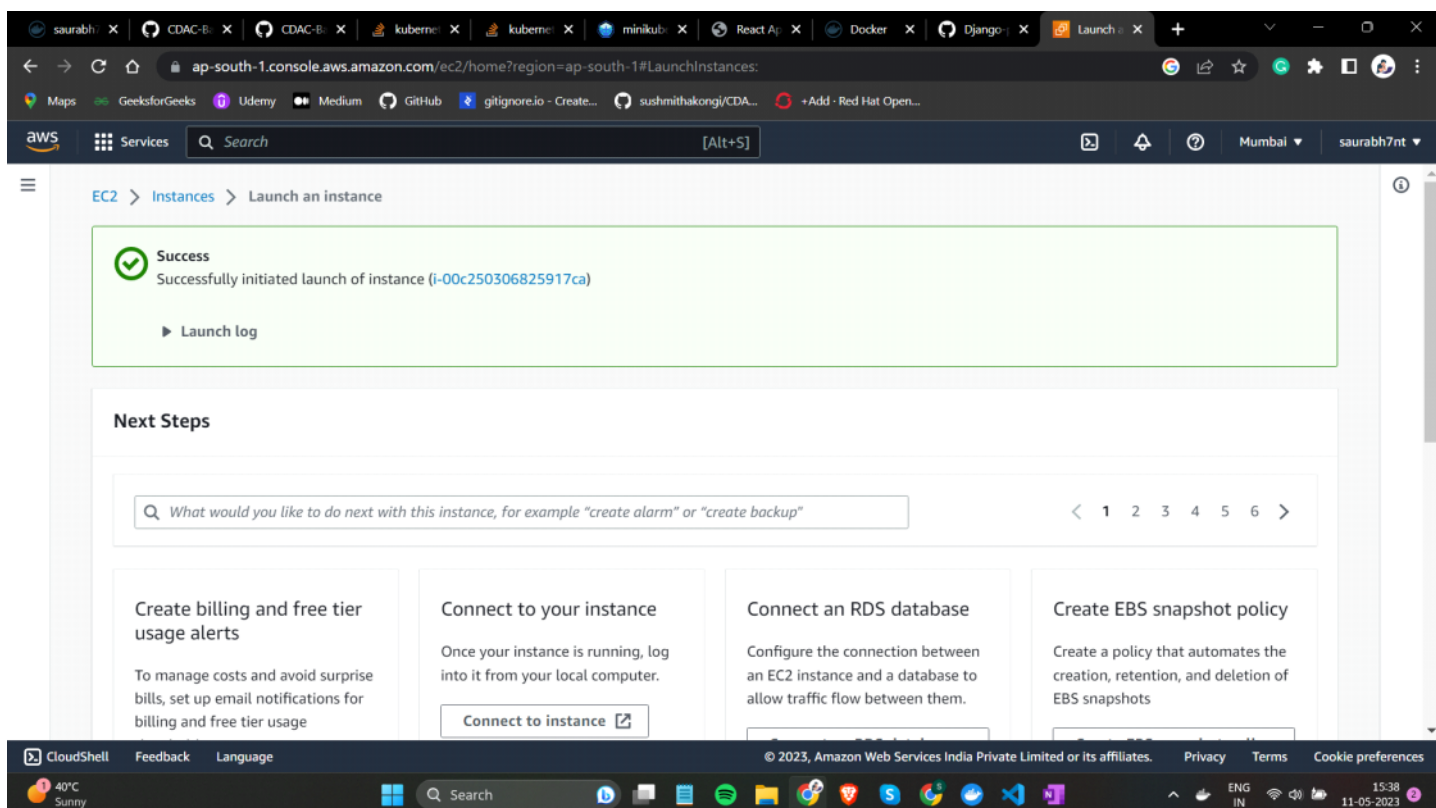


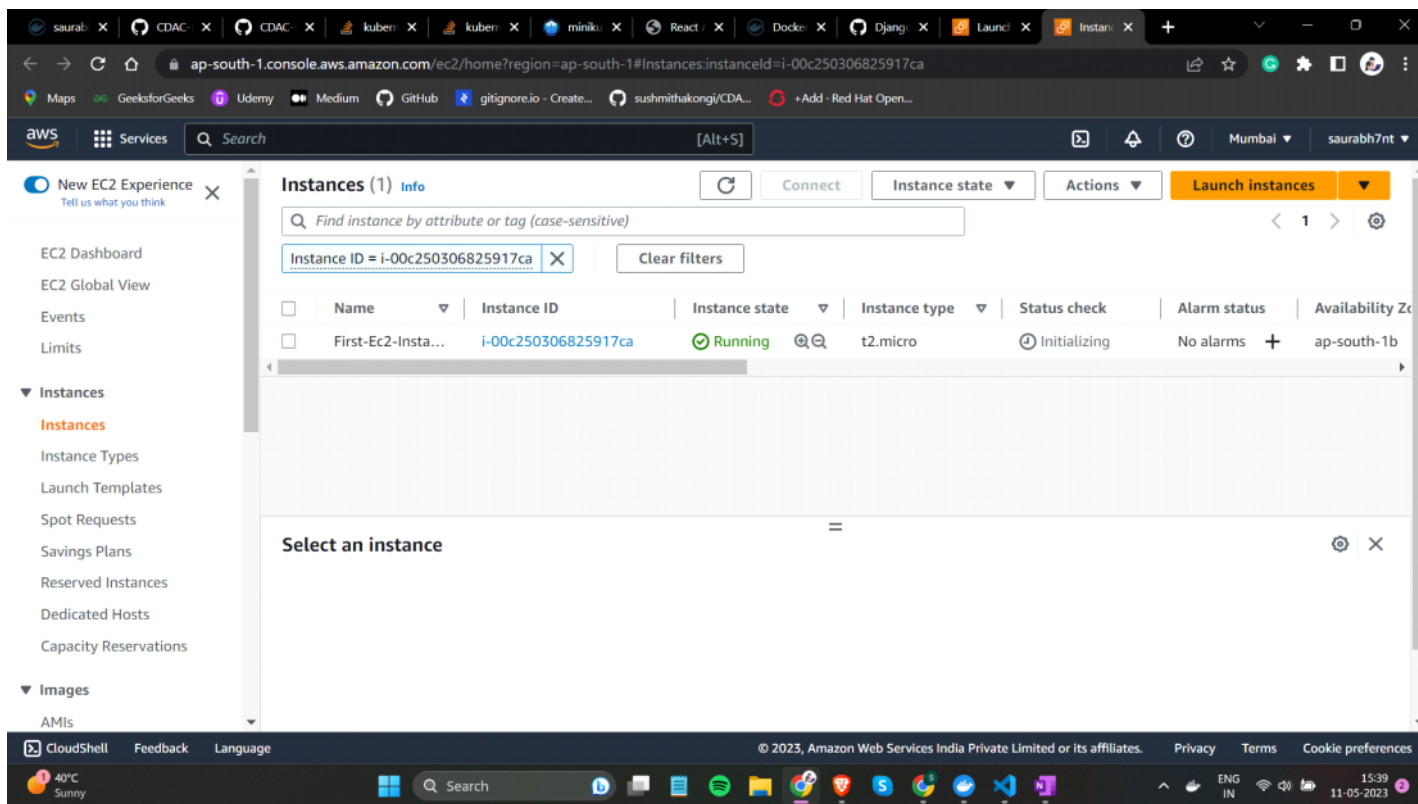
11 May 2023 15:01

Created an AWS account :

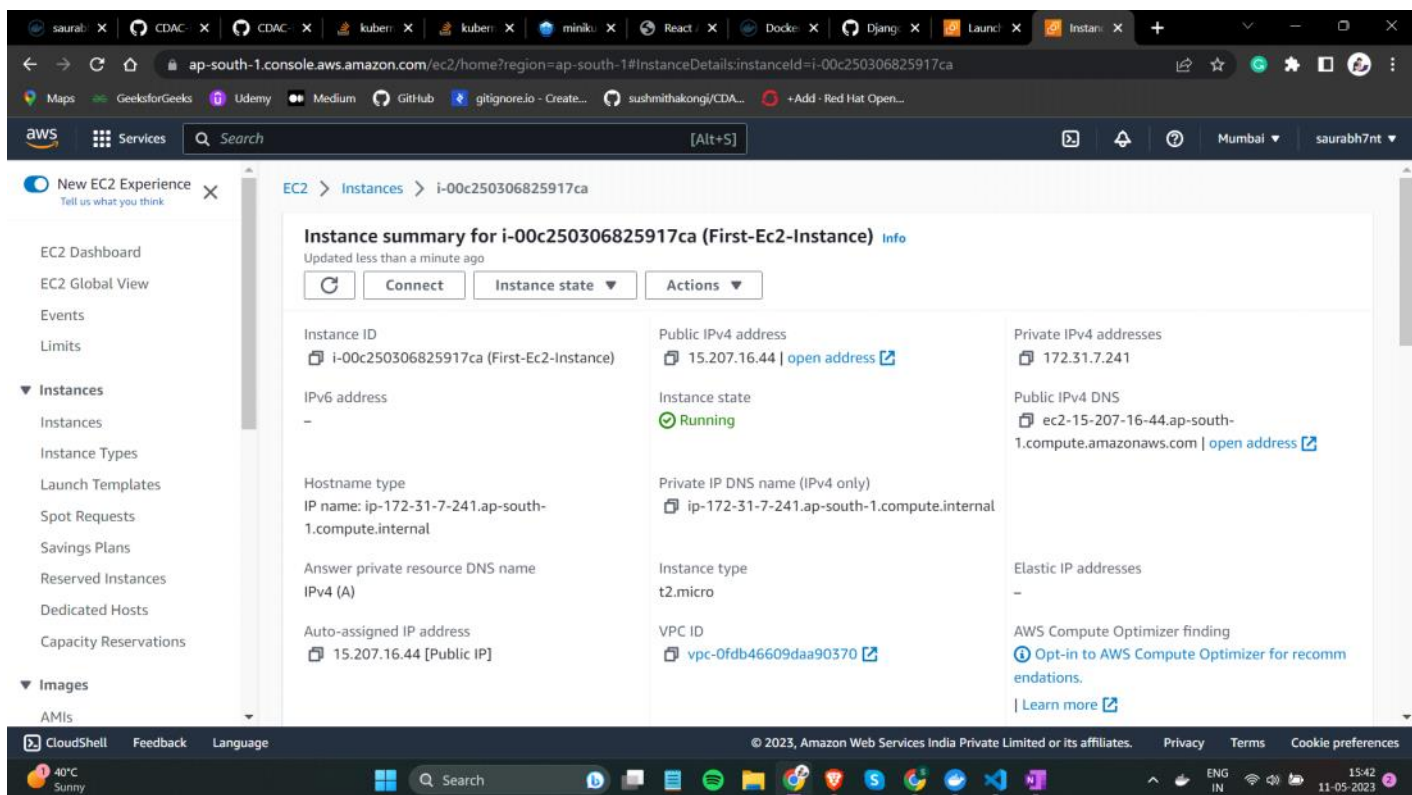


Launched the first EC2 instance with ubuntu os :





Instance Details :



Accessing the instance through our local machine :

```
ubuntu@ip-172-31-7-241: ~$ ssh -i "amazon-ec2-key.pem" ubuntu@ec2-15-207-16-44.ap-south-1.compute.amazonaws.com
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\LEGION\Downloads> ssh -i "amazon-ec2-key.pem" ubuntu@ec2-15-207-16-44.ap-south-1.compute.amazonaws.com
The authenticity of host 'ec2-15-207-16-44.ap-south-1.compute.amazonaws.com (15.207.16.44)' can't be established.
ED25519 key fingerprint is SHA256:cjFTx5ITLPs6PdUaW4W8sIxobVIqkyQMiyctltAnzpu.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-15-207-16-44.ap-south-1.compute.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.15.0-1031-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Thu May 11 10:18:06 UTC 2023

System load:  0.0          Processes:    96
Usage of /:   20.2% of 7.57GB   Users logged in:  0
Memory usage: 21%          IPv4 address for eth0: 172.31.7.241
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-7-241:~$
```

To see the OS in our instance :

```
ubuntu@ip-172-31-7-241:~$ cat /etc/os-release
PRETTY_NAME="Ubuntu 22.04.2 LTS"
NAME="Ubuntu"
VERSION_ID="22.04"
VERSION="22.04.2 LTS (Jammy Jellyfish)"
VERSION_CODENAME=jammy
ID=ubuntu
ID_LIKE=debian
HOME_URL="https://www.ubuntu.com/"
SUPPORT_URL="https://help.ubuntu.com/"
BUG_REPORT_URL="https://bugs.launchpad.net/ubuntu/"
PRIVACY_POLICY_URL="https://www.ubuntu.com/legal/terms-and-policies/privacy-policy"
UBUNTU_CODENAME=jammy
ubuntu@ip-172-31-7-241:~$
```

```
ubuntu@ip-172-31-7-241:~$ free -m
              total        used        free      shared  buff/cache   available
Mem:           966        182         373           0          410         642
Swap:           0           0           0

ubuntu@ip-172-31-7-241:~$ lscpu
Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Address sizes: 46 bits physical, 48 bits virtual
Byte Order: Little Endian
CPU(s): 1
On-line CPU(s) list: 0
Vendor ID: GenuineIntel
Model name: Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz
CPU family: 6
Model: 63
Thread(s) per core: 1
Core(s) per socket: 1
Socket(s): 1
Stepping: 2
BogoMIPS: 4800.00
Flags: fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ht syscall nx rdtscp lm constant_ tsc rep
_good nopl xtopology cpuid tsc_known_freq pni pclmulqdq ssse3 fma cx16 pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline.t ier aes xsave avx f16c rdrand hypervisor
or lahfh_lbm abm cpuid_fault invpcid_single pti fsgsbase bmi1 avx2 smep bmi2 erms invpcid xsav eopt
Virtualization features:
Hypervisor vendor: Xen
Virtualization type: full
Caches (sum of all):
L1d: 32 KiB (1 instance)
L1i: 32 KiB (1 instance)
L2: 256 KiB (1 instance)
L3: 30 MiB (1 instance)
NUMA:
NUMA node(s): 1
NUMA node0 CPU(s): 0
Vulnerabilities:
Itlb multihit: KVM: Mitigation: VMX unsupported
L1tf: Mitigation; PTE Inversion
Mds: Vulnerable; Clear CPU buffers attempted, no microcode; SMT Host state unknown
Meltdown: Mitigation; PTI
Mmio stale data: Vulnerable; Clear CPU buffers attempted, no microcode; SMT Host state unknown
Retbleed: Not affected
Spec store bypass: Vulnerable
Spectre v1: Mitigation; usercopy/swapgs barriers and __user pointer sanitization
Spectre v2: Mitigation; Retpolines, STIBP disabled, RSB filling, PBSRB-eIBRS Not affected
Srbds: Not affected
Tsx async abort: Not affected
ubuntu@ip-172-31-7-241:~$
```

Installing an jdk and Running an java program inside the ubuntu instance :

1. Updating the package

```
ubuntu@ip-172-31-7-241:~$ sudo apt-get update
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [108 kB]
Get:5 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:6 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [362 kB]
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:8 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [107 kB]
Get:9 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [9716 B]
Get:10 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [225 kB]
Get:11 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:12 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:13 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:14 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:15 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [577 kB]
Get:16 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [33.3 kB]
Get:17 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f Metadata [604 B]
Get:18 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [709 kB]
Get:19 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [166 kB]
Get:20 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [14.4 kB]
Get:21 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [226 kB]
Get:22 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [33.7 kB]
Get:23 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 c-n-f Metadata [604 B]
Get:24 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [887 kB]
Get:25 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [182 kB]
Get:26 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [18.8 kB]
Get:27 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [34.9 kB]
Get:28 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [8080 B]
Get:29 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [468 B]
Get:30 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [40.9 kB]
Get:31 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [10.2 kB]
Get:32 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [308 B]
Get:33 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:34 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [122 kB]
Get:35 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [14.3 kB]
Get:36 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [30.2 kB]
Get:37 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [22.2 kB]
Get:38 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [15.0 kB]
Get:39 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [548 B]
Get:40 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:41 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [5828 B]
Get:42 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [252 B]
Fetched 24.6 MB in 5s (5357 kB/s)
Reading package lists... Done
ubuntu@ip-172-31-7-241:~$
```

2. Installing JDK :


```
ubuntu@ip-172-31-7-241: ~$ vi HelloWorld.java
ubuntu@ip-172-31-7-241: ~$ cat HelloWorld.java
public class HelloWorld{
    public static void main(String[] args){
        System.out.println("Hello World !");
    }
}
ubuntu@ip-172-31-7-241: ~$ javac HelloWorld.java
ubuntu@ip-172-31-7-241: ~$ java HelloWorld
Hello World !
ubuntu@ip-172-31-7-241: ~$
```

Terminating Instance :

The screenshot shows the AWS Management Console interface. At the top, a green banner indicates "Successfully terminated i-00c250306825917ca". Below this, the "Instances (1/1) Info" section displays a table with one instance:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
First-Ec2-Insta...	i-00c250306825917ca	Shutting-down	t2.micro	2/2 checks passed	No alarms	ap-south-1b

Below the table, the "Instance: i-00c250306825917ca (First-Ec2-Instance)" details are shown, including tabs for Details, Security, Networking, Storage, Status checks, Monitoring, and Tags. The "Instance summary" section is partially visible at the bottom.