

CLOUD CONNECTION

```
eu-north-1.console.aws.amazon.com/ec2-instance-connect/ssh/home?addressFamily=ipv4&connType=standard&instanceId=i-018d...  
aws Search [Alt+S]  
javapackages-filesystem-6.0.0-7.amzn2023.0.6.noarch  
langpacks-core-font-en-3.0-21.amzn2023.0.4.noarch  
libICE-1.1.1-3.amzn2023.0.1.x86_64  
libSM-1.2.4-3.amzn2023.0.1.x86_64  
libX11-1.8.10-2.amzn2023.0.1.x86_64  
libX11-common-1.8.10-2.amzn2023.0.1.noarch  
libXau-1.0.11-6.amzn2023.0.1.x86_64  
libXext-1.3.6-1.amzn2023.0.1.x86_64  
libXi-1.8.2-1.amzn2023.0.1.x86_64  
libXinerama-1.1.5-6.amzn2023.0.1.x86_64  
libXrandr-1.5.4-3.amzn2023.0.1.x86_64  
libXrender-0.9.11-6.amzn2023.0.1.x86_64  
libXt-1.3.0-3.amzn2023.0.1.x86_64  
libXtst-1.2.5-1.amzn2023.0.1.x86_64  
libbrotli-1.0.9-4.amzn2023.0.2.x86_64  
libjpeg-turbo-2.1.4-2.amzn2023.0.5.x86_64  
libpng-2:1.6.37-10.amzn2023.0.8.x86_64  
libxcb-1.17.0-1.amzn2023.0.1.x86_64  
pixman-0.43.4-1.amzn2023.0.4.x86_64  
xml-common-0.6.3-56.amzn2023.0.2.noarch  
Complete!  
[root@ip-172-31-47-63 ec2-user]# java -version  
openjdk version "17.0.17" 2025-10-21 LTS  
OpenJDK Runtime Environment Corretto-17.0.17.10.1 (build 17.0.17+10-LTS)  
OpenJDK 64-Bit Server VM Corretto-17.0.17.10.1 (build 17.0.17+10-LTS, mixed mode, sharing)  
[root@ip-172-31-47-63 ec2-user]#  
i-018ddf6310f04bf46 (DistributedSystemServers)  
PublicIPs: 16.171.19.213 PrivateIPs: 172.31.47.63
```

RPC_SERVER.PY (CLOUD)

```
[ec2-user@ip-172-31-47-63 ~]$ nano rcp_server.py  
[ec2-user@ip-172-31-47-63 ~]$ python3 rcp_server.py  
RPC Student Service running on port 8000 (Cloud Ready)...  
[SERVER] Fetching details for Roll No: 101  
152.57.92.150 - - [17/Jan/2026 18:21:31] "POST / HTTP/1.1" 200 -  
[SERVER] Calculating grade for Roll No: 101  
152.57.92.150 - - [17/Jan/2026 18:21:32] "POST / HTTP/1.1" 200 -  
[SERVER] Checking pass status for Roll No: 101  
152.57.92.150 - - [17/Jan/2026 18:21:32] "POST / HTTP/1.1" 200 -  
i-018ddf6310f04bf46 (DistributedSystemServers)
```

RPC_CLIENT.PY

```

C:\Users\kf_20\OneDrive\Desktop\Distributed>python rcp_client.py
-----
Connecting to Cloud RPC Student Service...
-----
Sending request for Roll Number: 101
-----
Student Details Retrieved Successfully
  Name  : Arun
  Marks : 85
-----
Grade Information
  Grade : A
-----
Examination Result
  Status : PASS
-----
All remote procedure calls executed successfully.
Data fetched from Cloud-hosted RPC Server
C:\Users\kf_20\OneDrive\Desktop\Distributed>

```

FOLDER STRUCTURE

```

[ec2-user@ip-172-31-47-63 ~]$ nano StudentService.java
[ec2-user@ip-172-31-47-63 ~]$ nano StudentServiceImpl.java
[ec2-user@ip-172-31-47-63 ~]$ nano RMIServer.java
[ec2-user@ip-172-31-47-63 ~]$ nano RMIClient.java

```

RMI_SERVER.JAVA(CLOUD)

```

RMI Student Service running on port 1099...
^C[ec2-user@ip-172-31-47-63 RMIServer]$ javac StudentService.java StudentServiceImpl.java RMIServer.java
[ec2-user@ip-172-31-47-63 RMIServer]$ java RMIServer
RMI Student Service running on port 1099...
[SERVER] Sent student details for Roll No: 101
[SERVER] Grade calculated for Roll No: 101
[SERVER] Pass status checked for Roll No: 101

```

i-018ddf6310f04bf46 (DistributedSystemServers)

PublicIPs: 16.171.19.213 PrivateIPs: 172.31.47.63

RMI_CLIENT.JAVA

```

java.rmi.ConnectException: Connection refused to connect
PS C:\Users\kf_20\OneDrive\Desktop\Distributed> javac StudentService.java RMIClient.java
PS C:\Users\kf_20\OneDrive\Desktop\Distributed> java RMIClient
-----
Connecting to Cloud RMI Student Service...
-----
Requesting data for Roll No: 101
-----
Student Details Retrieved
  Name  : Arun
  Marks : 85
-----
? Grade : A
-----
Result : PASS
-----
All RMI method calls executed successfully.
Data received from Cloud-hosted RMI Server
PS C:\Users\kf_20\OneDrive\Desktop\Distributed>

```

