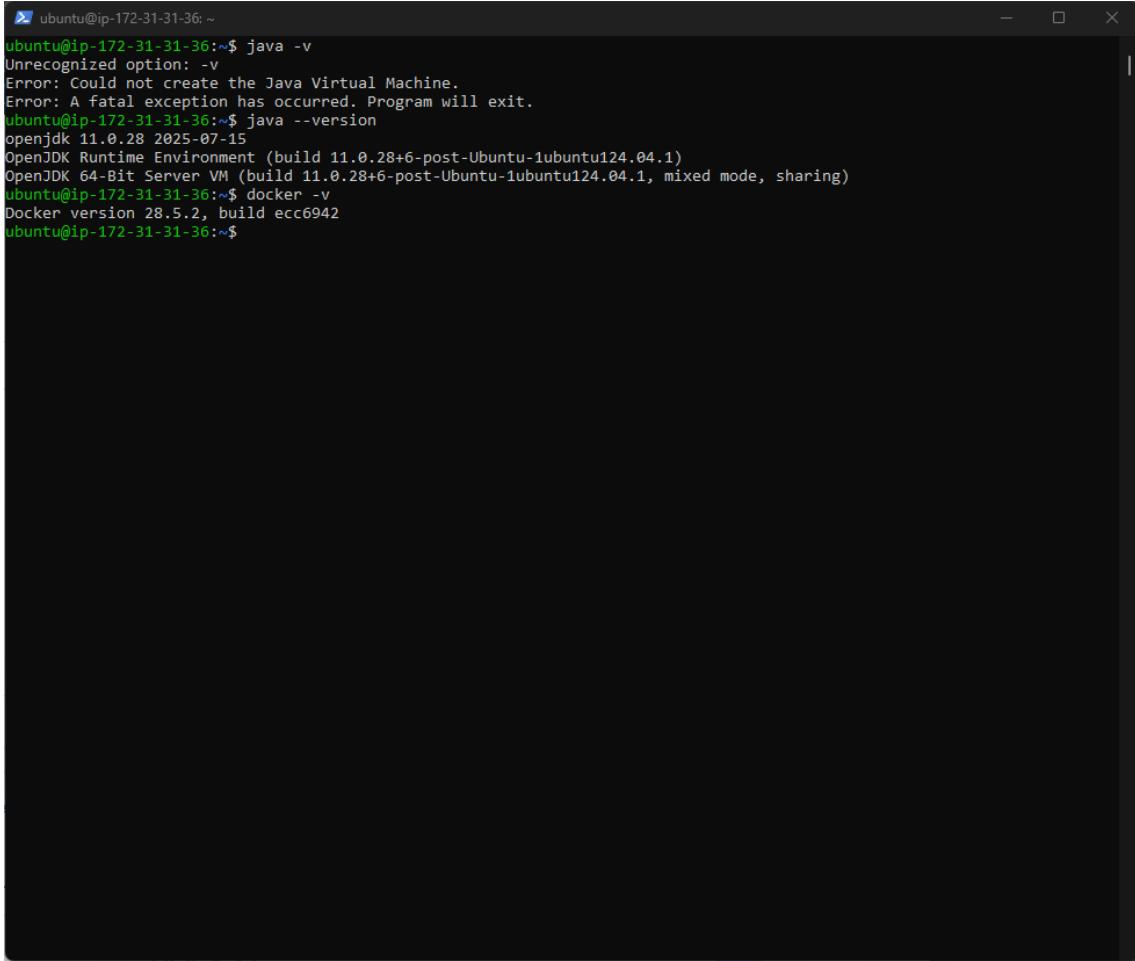**Relatório de Comandos: Deploy Manual AWS (Etapa 2)**

Comandos para o deploy manual (Etapa 2) dos ambientes de Produção e Homologação do CalculatorPlusWeb na AWS.

Fase 1: instalar apps no servidor

`sudo apt install dockerio `

`sudo apt install openjdk-11-jdk`

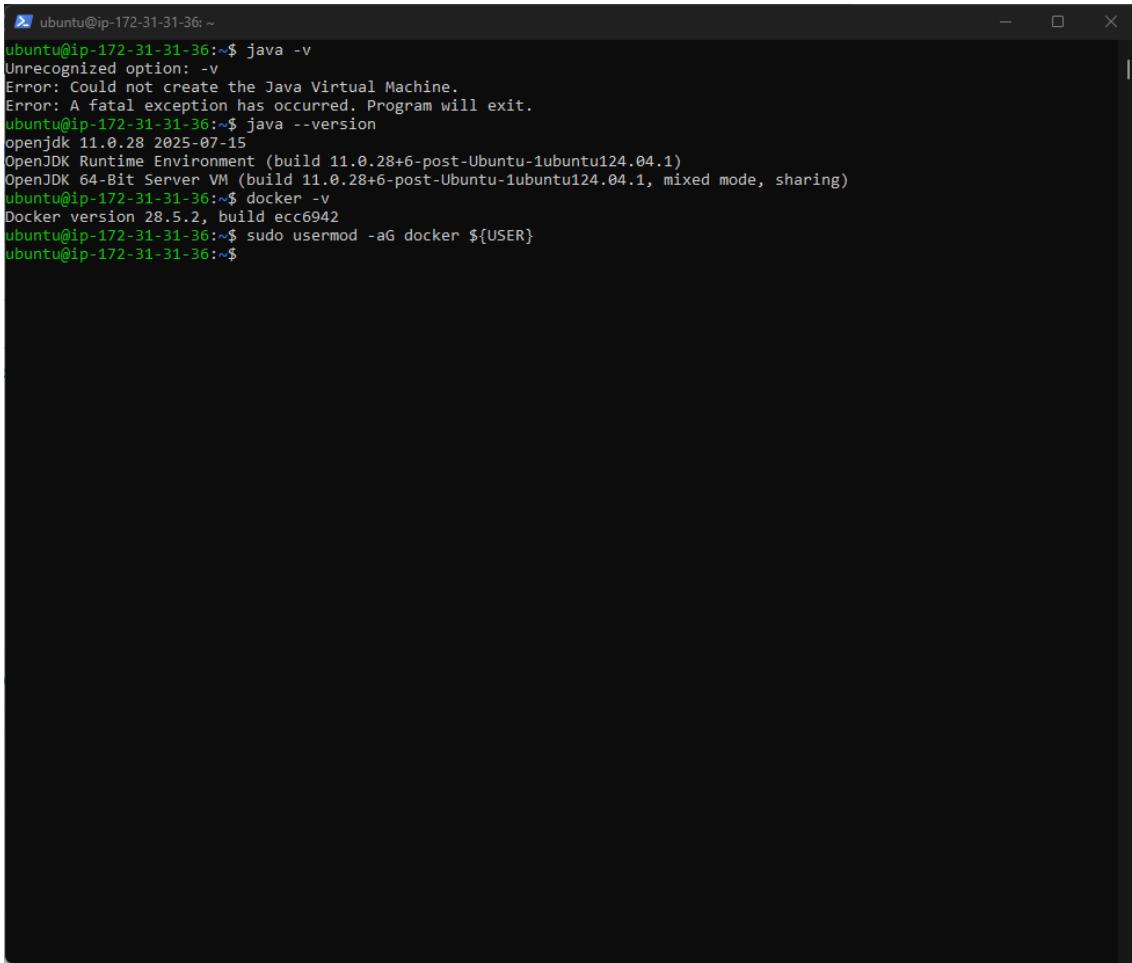**Fase 2: adicionar permissão ao usuário root para acessar Docker**


```
ubuntu@ip-172-31-31-36:~$ java -v
Unrecognized option: -v
Error: Could not create the Java Virtual Machine.
Error: A fatal exception has occurred. Program will exit.
ubuntu@ip-172-31-31-36:~$ java --version
openjdk 11.0.28 2025-07-15
OpenJDK Runtime Environment (build 11.0.28+6-post-Ubuntu-1ubuntu124.04.1)
OpenJDK 64-Bit Server VM (build 11.0.28+6-post-Ubuntu-1ubuntu124.04.1, mixed mode, sharing)
ubuntu@ip-172-31-31-36:~$ docker -v
Docker version 28.5.2, build ecc6942
ubuntu@ip-172-31-31-36:~$ sudo usermod -aG docker ${USER}
ubuntu@ip-172-31-31-36:~$
```

Fase 3: Transferir Código (PC Local)

- scp -i "...chave-server.pem" -r "[caminho do código fonte no meu PC]...CalculatorPlusProject" ubuntu@98.90.184.56:/home/ubuntu/

    o **Finalidade:** Copiar com segurança o código-fonte do PC local para o servidor AWS.

```
Windows PowerShell                          X    +  v                                      —   □   ✕

PS C:\Users\arthu\Desktop\Trabalho Testes\parte2> scp -i "C:\Users\arthu\Desktop\Trabalho Testes\parte2\chave-server.pem
" -r "C:\Users\arthu\Desktop\Trabalho Testes\parte2\testes-java\CalculatorPlusProject\CalculatorPlusProject" ubuntu@98.9
0.184.56:/home/ubuntu/
.classpath                                                       100% 2035    14.3KB/s   00:00
.factorypath                                                     100%   14KB 103.4KB/s   00:00
.gitignore                                                       100%  395     2.8KB/s   00:00
.project                                                         100% 1026     7.2KB/s   00:00
org.eclipse.core.resources.prefs                                 100%  191     1.3KB/s   00:00
org.eclipse.jdt.apt.core.prefs                                   100%  218     1.5KB/s   00:00
org.eclipse.jdt.core.prefs                                       100% 1311     9.2KB/s   00:00
org.eclipse.m2e.core.prefs                                       100%   90     0.6KB/s   00:00
org.springframework.ide.eclipse.prefs                            100%   65     0.5KB/s   00:00
settings.json                                                    100%  122     0.9KB/s   00:00
docker-compose-dev.yml                                           100%  848     6.0KB/s   00:00
docker-compose-prod.yml                                          100%  562     3.9KB/s   00:00
Dockerfile                                                       100%  464     3.3KB/s   00:00
HELP.md                                                          100% 1850    12.9KB/s   00:00
pom.xml                                                          100% 5461    38.4KB/s   00:00
CalculatorPlusApplication.java                                   100% 1639    11.4KB/s   00:00
SecurityConfiguration.java                                       100% 3361    23.6KB/s   00:00
UserDetailsServiceImpl.java                                      100% 2457    17.0KB/s   00:00
UserLogado.java                                                  100%  834     5.9KB/s   00:00
ApiResource.java                                                 100%  940     6.6KB/s   00:00
CompeticaoController.java                                        100% 4178    29.4KB/s   00:00
HomeController.java                                              100% 1835    12.9KB/s   00:00
RankingController.java                                           100% 1239     8.7KB/s   00:00
UsuarioController.java                                           100% 1801    12.7KB/s   00:00
JogoListDTO.java                                                 100%  570     4.0KB/s   00:00
RankingDTO.java                                                  100%  512     3.6KB/s   00:00
UserDTO.java                                                     100% 1196     8.3KB/s   00:00
```

Fase 4: Preparar Ambientes (Servidor AWS)

- mkdir homolog && mkdir prod

  - Finalidade: criar ambientes de homologação e produção

- rm -rf /home/ubuntu/prod/* && rm -rf /home/ubuntu/homolog/*

  - **Finalidade:** Limpar diretórios de deploy para evitar "builds sujos".

- cp -r /home/ubuntu/CalculatorPlusProject/* /home/ubuntu/prod/

- cp -r /home/ubuntu/CalculatorPlusProject/* /home/ubuntu/homolog/

  - **Finalidade:** Copiar o código-fonte atualizado para as pastas de ambiente.

```
ubuntu@ip-172-31-31-36: ~                                                          —  □  ×
PS C:\Users\arthu\Desktop\Trabalho Testes\parte2> ssh -i 'chave-server.pem' ubuntu@98.90.184.56
Welcome to Ubuntu 24.04.3 LTS (GNU/Linux 6.14.0-1016-aws x86_64)

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

 System information as of Sat Nov  8 13:50:29 UTC 2025

  System load:  0.0               Temperature:              -273.1 C
  Usage of /:   31.3% of 10.58GB  Processes:                113
  Memory usage: 13%               Users logged in:          0
  Swap usage:   0%                IPv4 address for ens5: 172.31.31.36


Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

4 additional security updates can be applied with ESM Apps.
Learn more about enabling ESM Apps service at https://ubuntu.com/esm


Last login: Sat Nov  8 13:44:53 2025 from 200.199.40.82
ubuntu@ip-172-31-31-36:~$ ls
CalculatorPlusProject
ubuntu@ip-172-31-31-36:~$ cd CalculatorPlusProject
ubuntu@ip-172-31-31-36:~/CalculatorPlusProject$ ls
Dockerfile  HELP.md  docker-compose-dev.yml  docker-compose-prod.yml  pom.xml  src  target
ubuntu@ip-172-31-31-36:~/CalculatorPlusProject$ cd ..
ubuntu@ip-172-31-31-36:~$ mkdir homolog
ubuntu@ip-172-31-31-36:~$ mkdir prod
ubuntu@ip-172-31-31-36:~$ ls
CalculatorPlusProject  homolog  prod
ubuntu@ip-172-31-31-36:~$ cp -r CalculatorPlusProject/* homolog/
ubuntu@ip-172-31-31-36:~$ cp -r CalculatorPlusProject/* prod/
ubuntu@ip-172-31-31-36:~$ cd homolog
ubuntu@ip-172-31-31-36:~/homolog$ ls
Dockerfile  HELP.md  docker-compose-dev.yml  docker-compose-prod.yml  pom.xml  src  target
ubuntu@ip-172-31-31-36:~/homolog$ cd ..
ubuntu@ip-172-31-31-36:~$ cd prod
ubuntu@ip-172-31-31-36:~/prod$ ls
Dockerfile  HELP.md  docker-compose-dev.yml  docker-compose-prod.yml  pom.xml  src  target
ubuntu@ip-172-31-31-36:~/prod$ cd ..
ubuntu@ip-172-31-31-36:~$
```

Fase 5: Deploy de Produção (Servidor AWS)

- cd /home/ubuntu/prod

- cp -r /home/ubuntu/CalculatorPlusProject/* /home/ubuntu/prod/

  - ○ **Finalidade**: copiar conteúdo do código-fonte para o ambiente de produção

- docker build -t calculator-plus:latest .

  - ○ **Finalidade:** Construir a imagem Docker otimizada a partir do Dockerfile (compilando o .jar).

- docker compose -f docker-compose-prod.yml up -d

  - ○ **Finalidade:** Iniciar os containers de produção (app) em segundo plano (-d).

- **Verificação:** Acessar http://98.90.184.56:9000

```
ubuntu@ip-172-31-31-36:~$ cp -r /home/ubuntu/CalculatorPlusProject/* /home/ubuntu/prod/
```

```
ubuntu@ip-172-31-31-36:~/prod$ docker build -t calculator-plus:latest .
[+] Building 101.7s (15/15) FINISHED                                                              docker:default
 => [internal] load build definition from Dockerfile                                                       0.0s
 => => transferring dockerfile: 580B                                                                       0.0s
 => [internal] load metadata for docker.io/library/eclipse-temurin:11-jre                                  0.3s
 => [internal] load metadata for docker.io/library/maven:3.8.6-openjdk-11                                  0.4s
 => [internal] load .dockerignore                                                                          0.0s
 => => transferring context: 2B                                                                            0.0s
 => [build 1/6] FROM docker.io/library/maven:3.8.6-openjdk-11                                              0.4s
 => [internal] load build context                                                                          0.3s
 => => transferring context: 8.02MB                                                                        0.2s
 => [stage-1 1/3] FROM docker.io/library/eclipse-temurin:11-jre@sha256:f73475871fe677beeeeb10b31ab628f05a63d2a24a07a298eb7f55767d25e0f5   4.5s
 => => resolve docker.io/library/eclipse-temurin:11-jre@sha256:f73475871fe677beeeeb10b31ab628f05a63d2a24a07a298eb7f55767d25e0f5           0.0s
 => => sha256:c1bb8e26bee77aeec96e1e3e07f0c31b1618f2d07ed5dd5d0d0041ed4dc92bc  5.65kB / 5.65kB             0.0s
 => => sha256:0b266857bc63960b8eb46e9d8c3530b7dbced5b09693ddbd1dd35c93e0f45a21 16.37MB / 16.37MB           0.2s
 => => sha256:dbb6d8dbb2b3f638af00c91273480fb0d1a9a5cb958f4227317bbeeeeae3e0cb5d 47.23MB / 47.23MB         0.7s
 => => sha256:fd4132a00b046a145854e1970ad7c42d7d00c2ca4abcd1c4bebb1034030415a2d 150B / 150B                0.1s
 => => sha256:f73475871fe677beeeeb10b31ab628f05a63d2a24a07a298eb7f55767d25e0f5 7.16kB / 7.16kB             0.0s
 => => sha256:acd588bb790b9c6355dfb8fb3fca9bb3132585a1a001b89963039e8e3b5f751c 1.94kB / 1.94kB             0.0s
 => => sha256:43cbcd2b0f0546e204a291cf713d9a4f7ba58072e0853171d4fd70014c2a24b7b 2.20kB / 2.20kB            0.2s
 => => extracting sha256:0b266857bc63960b8eb46e9d8c3530b7dbced5b09693ddbd1dd35c93e0f45a21                  1.2s
 => => extracting sha256:dbb6d8dbb2b3f638af00c91273480fb0d1a9a5cb958f4227317bbeeeeae3e0cb5d                1.5s
 => => extracting sha256:fd4132a00b046a145854e1970ad7c42d7d00c2ca4abcd1c4bebb1034030415a2d                 0.0s
 => => extracting sha256:43cbcd2b0f0546e204a291cf713d9a4f7ba58072e0853171d4fd70014c2a24b7b                 0.0s
 => [build 2/6] WORKDIR /app                                                                               0.2s
 => [build 3/6] COPY pom.xml .                                                                             0.3s
 => [build 4/6] RUN mvn dependency:go-offline -B                                                          80.3s
 => [stage-1 2/3] WORKDIR /app                                                                             0.2s
 => [build 5/6] COPY src ./src                                                                             0.2s
 => [build 6/6] RUN mvn clean package -DskipTests                                                         18.6s
 => [stage-1 3/3] COPY --from=build /app/target/*.jar app.jar                                              0.3s
 => exporting to image                                                                                     0.4s
 => => exporting layers                                                                                    0.3s
 => => writing image sha256:95e44c036583320e92416caa41a5e45764b1331dc1b7d78ed80ea3de28475f8f0              0.0s
 => => naming to docker.io/library/calculator-plus:latest                                                  0.0s
ubuntu@ip-172-31-31-36:~/prod$
```

Fase 6: Deploy e Teste de Homologação (Servidor AWS)

- cd /home/ubuntu/homolog

- cp -r /home/ubuntu/CalculatorPlusProject/* /home/ubuntu/homolog/

  - Finalidade: copiar conteúdo do código-fonte para o ambiente de homologação

- docker compose -f docker-compose-dev.yml up -d

  - **Finalidade:** Iniciar o ambiente de homologação (compilação em tempo real).

- docker exec calc-app mvn test

  - **Finalidade:** Executar os Casos de Teste dentro do container calc-app.

- **Verificação:** Acessar http://98.90.184.56:8090

```
ubuntu@ip-172-31-31-36:~$ cp -r /home/ubuntu/CalculatorPlusProject/* /home/ubuntu/homolog/
```



```
ubuntu@ip-172-31-31-36:~$ cd homolog
ubuntu@ip-172-31-31-36:~/homolog$ docker-compose -f docker-compose-dev.yml up -d
Command 'docker-compose' not found, but can be installed with:
sudo snap install docker          # version 28.4.0, or
sudo snap install docker          # version 28.1.1+1
sudo apt  install docker-compose  # version 1.29.2-6
See 'snap info <snapname>' for additional versions.
ubuntu@ip-172-31-31-36:~/homolog$ docker compose -f docker-compose-dev.yml up -d
WARN[0000] /home/ubuntu/homolog/docker-compose-dev.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
[+] Running 48/48
 ✔ maven Pulled                                                          24.1s
 ✔ chrome Pulled                                                         44.0s

[+] Running 3/3
 ✔ Network homolog_app-network   Created                                 0.1s
 ✔ Container calc-app            Started                                  0.8s
 ✔ Container selenium-chrome     Started                                  0.8s
ubuntu@ip-172-31-31-36:~/homolog$ docker ps
CONTAINER ID   IMAGE                              COMMAND                  CREATED        STATUS         PORTS                                                                                                     NAMES
09c136175cc32  selenium/standalone-chrome:latest  "/opt/bin/entry_poin…"   9 seconds ago  Up 8 seconds   0.0.0.0:4444->4444/tcp, [::]:4444->4444/tcp, 5900/tcp, 0.0.0.0:7900->7900/tcp, [::]:7900->7900/tcp, 9000/tcp  selenium-chrome
b00c05e5b5bf   maven:3.8.6-openjdk-11             "/usr/local/bin/mvn-…"   9 seconds ago  Up 8 seconds   0.0.0.0:9000->9000/tcp, [::]:9000->9000/tcp                                                                calc-app
ubuntu@ip-172-31-31-36:~/homolog$
```

Fase 7: Diagnóstico (Debug)

- docker logs [nome do container]

  - **Finalidade:** Inspecionar os logs de um container para diagnosticar eventuais falhas nos *containers*.