CLOUD COMPUTING

NAME – ANKUR SHARMA

SRN – PES2UG23CS077

SS1 :


```
ankur@JITU:/mnt/c/Users/ankur/Desktop/SEM6/cc-lab4/PES2UG23CS077$ export SRN=PES2UG23CS077
ankur@JITU:/mnt/c/Users/ankur/Desktop/SEM6/cc-lab4/PES2UG23CS077$ echo $SRN
PES2UG23CS077
ankur@JITU:/mnt/c/Users/ankur/Desktop/SEM6/cc-lab4/PES2UG23CS077$ export PS1="[\u@$SRN \W]\$ "
[ankur@PES2UG23CS077 PES2UG23CS077]$ Ankur@123
Ankur@123: command not found
[ankur@PES2UG23CS077 PES2UG23CS077]$ docker run hello-world

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
 $ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
 https://hub.docker.com/

For more examples and ideas, visit:
 https://docs.docker.com/get-started/

[ankur@PES2UG23CS077 PES2UG23CS077]$
```

SS2 :

```
[ankur@PES2UG23CS077 PES2UG23CS077]$ docker compose version
Docker Compose version v5.0.2
[ankur@PES2UG23CS077 PES2UG23CS077]$
```

SS3 :

```
[ankur@PES2UG23CS077 Docker_lab_advanced]$ docker ps
CONTAINER ID   IMAGE                  COMMAND                  CREATED          STATUS              PORTS
                                                        NAMES
144d88f8d26c   rabbitmq:3-management  "docker-entrypoint.s…"   About a minute ago   Up About a minute   4369/tcp, 5671-
5672/tcp, 15671-15672/tcp, 15691-15692/tcp, 25672/tcp   rabbitmq
```
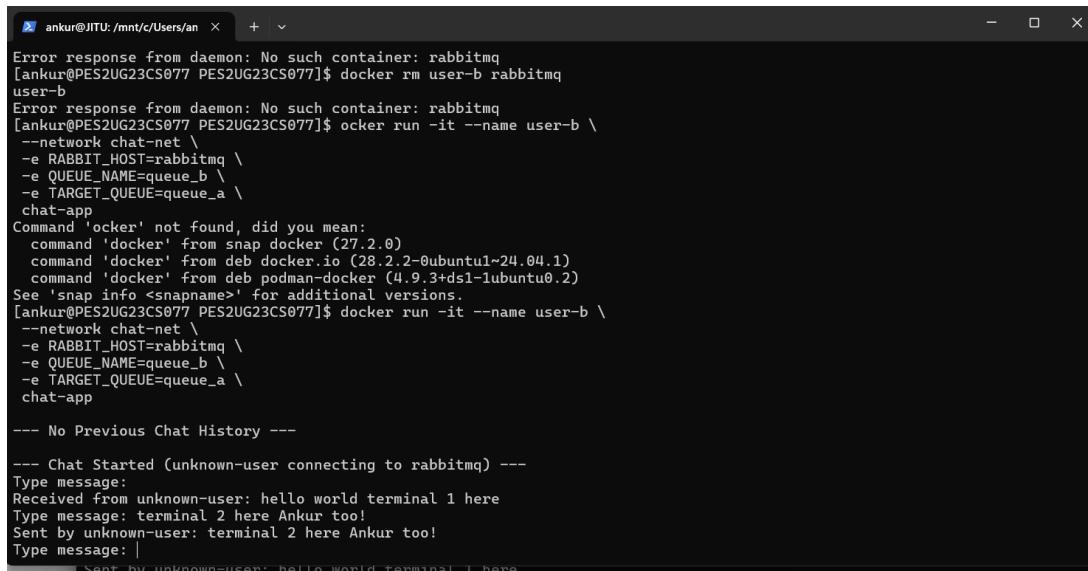
SS4 :

```
--- No Previous Chat History ---

--- Chat Started (unknown-user connecting to localhost) ---
RabbitMQ not ready, retrying... (1/5)RabbitMQ not ready, retrying... (1/5)

RabbitMQ not ready, retrying... (2/5)RabbitMQ not ready, retrying... (2/5)

RabbitMQ not ready, retrying... (3/5)
RabbitMQ not ready, retrying... (3/5)
RabbitMQ not ready, retrying... (4/5)
RabbitMQ not ready, retrying... (4/5)
RabbitMQ not ready, retrying... (5/5)
RabbitMQ not ready, retrying... (5/5)

ERROR: Could not connect to RabbitMQ at localhost

ERROR: Could not connect to RabbitMQ at localhost

Falling back to standalone mode...
==============================================
STANDALONE MODE (No RabbitMQ)
==============================================

--- No Previous Chat History ---

Messages will not be sent to any other container.

Type message (standalone): Hello world, Ankur here.
Sent by unknown-user (standalone): Hello world, Ankur here.
```

SS5 :

```
ankur@JITU: /mnt/c/Users/an

docker: Error response from daemon: Conflict. The container name "/user-a" is already in use by container "6d4e5225667ec
6f364362764185a03eea303f5cf58aeea7c122a0eecec585648". You have to remove (or rename) that container to be able to reuse
that name.

Run 'docker run --help' for more information
[ankur@PES2UG23CS077 Docker_lab_advanced]$ docker stop user-a rabbitmq
user-a
rabbitmq
[ankur@PES2UG23CS077 Docker_lab_advanced]$ docker rm user-a rabbitmq
user-a
rabbitmq
[ankur@PES2UG23CS077 Docker_lab_advanced]$ docker run -d --name rabbitmq --network chat-net rabbitmq:3-management
c9bfa3de9999eb063b933cc36299e8fe014be80270546b28e1cf5cbd2ad542bb
[ankur@PES2UG23CS077 Docker_lab_advanced]$ docker run -it --name user-a \
 --network chat-net \
 -e RABBIT_HOST=rabbitmq \
 -e QUEUE_NAME=queue_a \
 -e TARGET_QUEUE=queue_b \
 chat-app

--- No Previous Chat History ---

--- Chat Started (unknown-user connecting to rabbitmq) ---
RabbitMQ not ready, retrying... (1/5)RabbitMQ not ready, retrying... (1/5)

Type message: hello world terminal 1 here
Sent by unknown-user: hello world terminal 1 here
Type message:
Received from unknown-user: terminal 2 here Ankur too!
Type message:
```
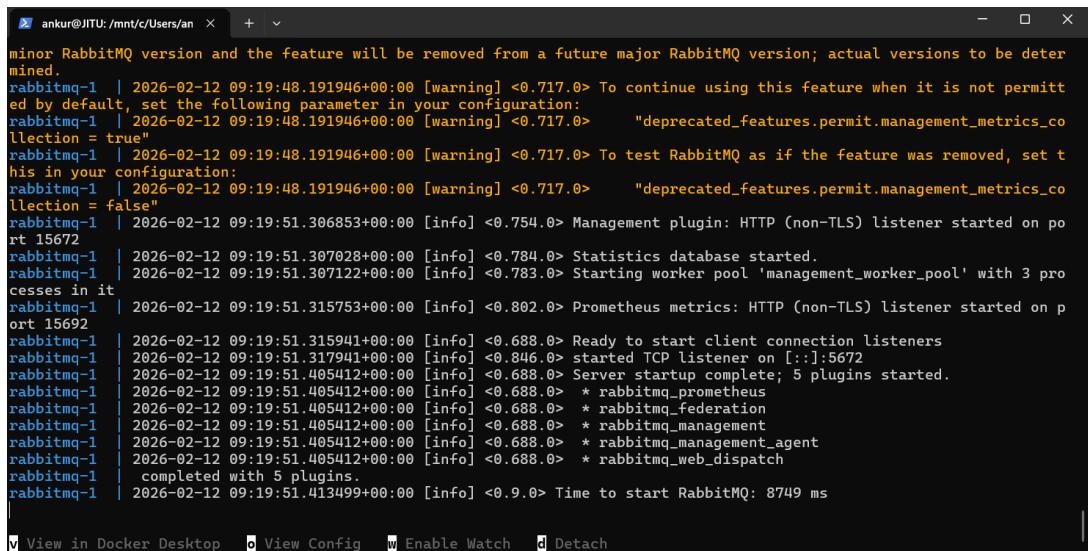
SS6 :


```
ankur@JITU: /mnt/c/Users/an  ×  +  ∨                                    —  □  ×

Error response from daemon: No such container: rabbitmq
[ankur@PES2UG23CS077 PES2UG23CS077]$ docker rm user-b rabbitmq
user-b
Error response from daemon: No such container: rabbitmq
[ankur@PES2UG23CS077 PES2UG23CS077]$ ocker run -it --name user-b \
 --network chat-net \
 -e RABBIT_HOST=rabbitmq \
 -e QUEUE_NAME=queue_b \
 -e TARGET_QUEUE=queue_a \
 chat-app
Command 'ocker' not found, did you mean:
  command 'docker' from snap docker (27.2.0)
  command 'docker' from deb docker.io (28.2.2-0ubuntu1~24.04.1)
  command 'docker' from deb podman-docker (4.9.3+ds1-1ubuntu0.2)
See 'snap info <snapname>' for additional versions.
[ankur@PES2UG23CS077 PES2UG23CS077]$ docker run -it --name user-b \
 --network chat-net \
 -e RABBIT_HOST=rabbitmq \
 -e QUEUE_NAME=queue_b \
 -e TARGET_QUEUE=queue_a \
 chat-app

--- No Previous Chat History ---

--- Chat Started (unknown-user connecting to rabbitmq) ---
Type message:
Received from unknown-user: hello world terminal 1 here
Type message: terminal 2 here Ankur too!
Sent by unknown-user: terminal 2 here Ankur too!
Type message: |
   Sent by unknown-user: hello world terminal 1 here
```

SS7 :

```
[ankur@PES2UG23CS077 Docker_lab_advanced]$ docker stop user-a user-b rabbitmq
user-a
user-b
rabbitmq
[ankur@PES2UG23CS077 Docker_lab_advanced]$ docker rm user-a user-b rabbitmq
user-a
user-b
rabbitmq
[ankur@PES2UG23CS077 Docker_lab_advanced]$ docker network rm chat-net
chat-net
[ankur@PES2UG23CS077 Docker_lab_advanced]$
```

SS8 :


```
ankur@JITU: /mnt/c/Users/an  ×  +  ∨                                    —  □  ×

minor RabbitMQ version and the feature will be removed from a future major RabbitMQ version; actual versions to be deter
mined.
rabbitmq-1  | 2026-02-12 09:19:48.191946+00:00 [warning] <0.717.0> To continue using this feature when it is not permitt
ed by default, set the following parameter in your configuration:
rabbitmq-1  | 2026-02-12 09:19:48.191946+00:00 [warning] <0.717.0>     "deprecated_features.permit.management_metrics_co
llection = true"
rabbitmq-1  | 2026-02-12 09:19:48.191946+00:00 [warning] <0.717.0> To test RabbitMQ as if the feature was removed, set t
his in your configuration:
rabbitmq-1  | 2026-02-12 09:19:48.191946+00:00 [warning] <0.717.0>     "deprecated_features.permit.management_metrics_co
llection = false"
rabbitmq-1  | 2026-02-12 09:19:51.306853+00:00 [info] <0.754.0> Management plugin: HTTP (non-TLS) listener started on po
rt 15672
rabbitmq-1  | 2026-02-12 09:19:51.307028+00:00 [info] <0.784.0> Statistics database started.
rabbitmq-1  | 2026-02-12 09:19:51.307122+00:00 [info] <0.783.0> Starting worker pool 'management_worker_pool' with 3 pro
cesses in it
rabbitmq-1  | 2026-02-12 09:19:51.315753+00:00 [info] <0.802.0> Prometheus metrics: HTTP (non-TLS) listener started on p
ort 15692
rabbitmq-1  | 2026-02-12 09:19:51.315941+00:00 [info] <0.688.0> Ready to start client connection listeners
rabbitmq-1  | 2026-02-12 09:19:51.317941+00:00 [info] <0.846.0> started TCP listener on [::]:5672
rabbitmq-1  | 2026-02-12 09:19:51.405412+00:00 [info] <0.688.0> Server startup complete; 5 plugins started.
rabbitmq-1  | 2026-02-12 09:19:51.405412+00:00 [info] <0.688.0>  * rabbitmq_prometheus
rabbitmq-1  | 2026-02-12 09:19:51.405412+00:00 [info] <0.688.0>  * rabbitmq_federation
rabbitmq-1  | 2026-02-12 09:19:51.405412+00:00 [info] <0.688.0>  * rabbitmq_management
rabbitmq-1  | 2026-02-12 09:19:51.405412+00:00 [info] <0.688.0>  * rabbitmq_management_agent
rabbitmq-1  | 2026-02-12 09:19:51.405412+00:00 [info] <0.688.0>  * rabbitmq_web_dispatch
rabbitmq-1  |    completed with 5 plugins.
rabbitmq-1  | 2026-02-12 09:19:51.413499+00:00 [info] <0.9.0> Time to start RabbitMQ: 8749 ms

v View in Docker Desktop   o View Config   w Enable Watch   d Detach
```

SS9 :


```
=> => transferring context: 29B                                                                         0.0s
=> CACHED [2/5] RUN pip install pika                                                                     0.0s
=> CACHED [3/5] WORKDIR /app                                                                             0.0s
=> CACHED [4/5] COPY chat.py .                                                                           0.0s
=> CACHED [5/5] RUN mkdir -p /app/data                                                                   0.0s
=> exporting to image                                                                                    0.1s
=> => exporting layers                                                                                   0.0s
=> => exporting manifest sha256:30708cb8df0aca00ef551aa72b068e95d6d90799f1da4b15c8edbf7c70c89c67         0.0s
=> => exporting config sha256:63808660bbcac95948c8269d541862de59298ca95d8816bf89a7f8a6b4586798           0.0s
=> => exporting attestation manifest sha256:5b4b9165fb2ef0278dcee5eb5f246f625031eccebc2a66fc8b97238010e209da  0.0s
=> => exporting manifest list sha256:4a9e6e46bc426fd4608bd8d382cfc0b8c59643d5415e2a1137ec4e5832a578b9    0.0s
=> => naming to docker.io/library/docker_lab_advanced-user-a:latest                                      0.0s
=> => unpacking to docker.io/library/docker_lab_advanced-user-a:latest                                   0.0s
=> resolving provenance for metadata file                                                                0.0s
Image docker_lab_advanced-user-a Built
Container docker_lab_advanced-user-a-run-4762b51c628f Creating
Container docker_lab_advanced-user-a-run-4762b51c628f Created

--- No Previous Chat History ---

--- Chat Started (user-a connecting to rabbitmq) ---
Type message: hello terminal 2 here
Sent by user-a: hello terminal 2 here
Type message:
Received from user-b: hello terminal 3 here
Type message:
Received from user-b: i m PES2UG23CS077
Type message: SAME HERE LMAO XD
Sent by user-a: SAME HERE LMAO XD
Type message: |
```

SS10 :


```
=> => transferring context: 29B                                                                         0.0s
=> CACHED [2/5] RUN pip install pika                                                                     0.0s
=> CACHED [3/5] WORKDIR /app                                                                             0.0s
=> CACHED [4/5] COPY chat.py .                                                                           0.0s
=> CACHED [5/5] RUN mkdir -p /app/data                                                                   0.0s
=> exporting to image                                                                                    0.1s
=> => exporting layers                                                                                   0.0s
=> => exporting manifest sha256:cc17e5955a2cdace81f7f279698b9bfaa6ed7540bb01ecd9220deb71cfb6e886         0.0s
=> => exporting config sha256:f32f76ee3118b360392aafaebe067311f579fac09c98603c077ca0c2285a3371           0.0s
=> => exporting attestation manifest sha256:04f90562ef3e5958387ce2659e178fcb3f3b5d48f4c745f844ed519975da2118  0.0s
=> => exporting manifest list sha256:28cde63c43b09c832cca3d49f69bd05d31aa6fb28422c42b27a3a295de852111    0.0s
=> => naming to docker.io/library/docker_lab_advanced-user-b:latest                                      0.0s
=> => unpacking to docker.io/library/docker_lab_advanced-user-b:latest                                   0.0s
=> resolving provenance for metadata file                                                                0.0s
Image docker_lab_advanced-user-b Built
Container docker_lab_advanced-user-b-run-8cd440a48198 Creating
Container docker_lab_advanced-user-b-run-8cd440a48198 Created

--- No Previous Chat History ---

--- Chat Started (user-b connecting to rabbitmq) ---
Type message:
Received from user-a: hello terminal 2 here
Type message: hello terminal 3 here
Sent by user-b: hello terminal 3 here
Type message: i m PES2UG23CS077
Sent by user-b: i m PES2UG23CS077
Type message:
Received from user-a: SAME HERE LMAO XD
Type message: |
```

SS11 :

```
[ankur@PES2UG23CS077 Docker_lab_advanced]$ docker compose run --rm user-a
WARN[0000] /mnt/c/Users/ankur/Desktop/SEM6/cc-lab4/PES2UG23CS077/Docker_lab_advanced/docker-compose.yml: the attribute `
version` is obsolete, it will be ignored, please remove it to avoid potential confusion
[+]  1/1t 1/11
   ✔Container docker_lab_advanced-rabbitmq-1 Running                                                             0.0s
Container docker_lab_advanced-user-a-run-8d02ca76337a Creating
Container docker_lab_advanced-user-a-run-8d02ca76337a Created

--- Chat History ---
Sent by user-b: hello there Ankur
Received from user-b: hello there Ankur
Sent by user-a: oh hi PES2UG23CS077
Received from user-a: oh hi PES2UG23CS077
Sent by user-b: nice
Received from user-b: nice
--- End of History ---

--- Chat Started (user-a connecting to rabbitmq) ---
Type message: |
```

SS12 :

```
[ankur@PESUG23CS077 Docker_lab_advanced]$ docker compose run --rm user-b
WARN[0000] /mnt/c/Users/ankur/Desktop/SEM6/cc-lab4/PES2UG23CS077/Docker_lab_advanced/docker-compose.yml: the attribute `
version` is obsolete, it will be ignored, please remove it to avoid potential confusion
[+]  1/1t 1/11
   ✔Container docker_lab_advanced-rabbitmq-1 Running                                                             0.0s
Container docker_lab_advanced-user-b-run-ec56891f6833 Creating
Container docker_lab_advanced-user-b-run-ec56891f6833 Created

--- Chat History ---
Sent by user-b: hello there Ankur
Received from user-b: hello there Ankur
Sent by user-a: oh hi PES2UG23CS077
Received from user-a: oh hi PES2UG23CS077
Sent by user-b: nice
Received from user-b: nice
--- End of History ---

--- Chat Started (user-b connecting to rabbitmq) ---
Type message: |
```