

Департамент образования и науки города Москвы
Государственное автономное образовательное учреждение
высшего образования города Москвы
«Московский городской педагогический университет»
Институт цифрового образования
Департамент информатики, управления и технологий

ДИСЦИПЛИНА:

Распределенные системы

Лабораторная работа 3

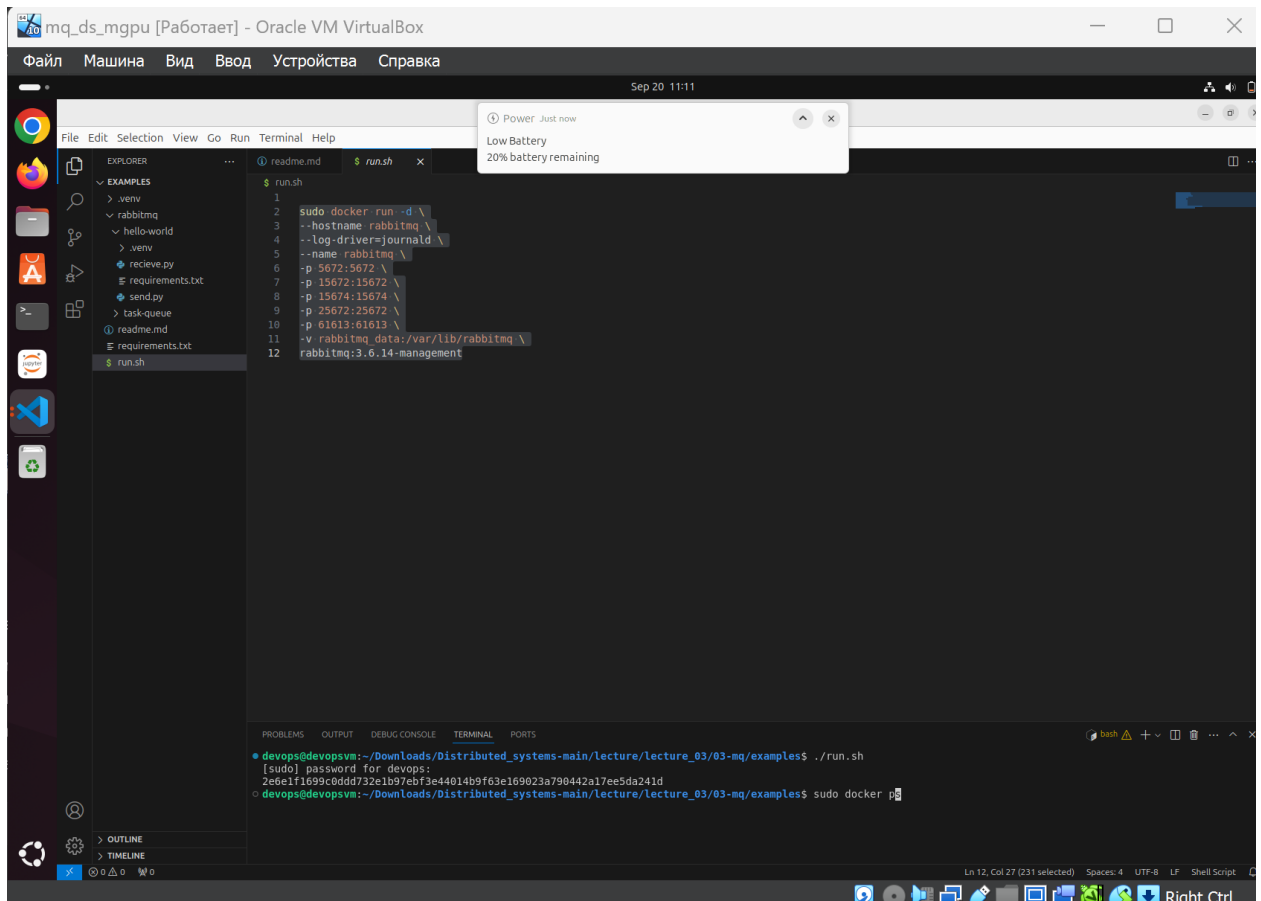
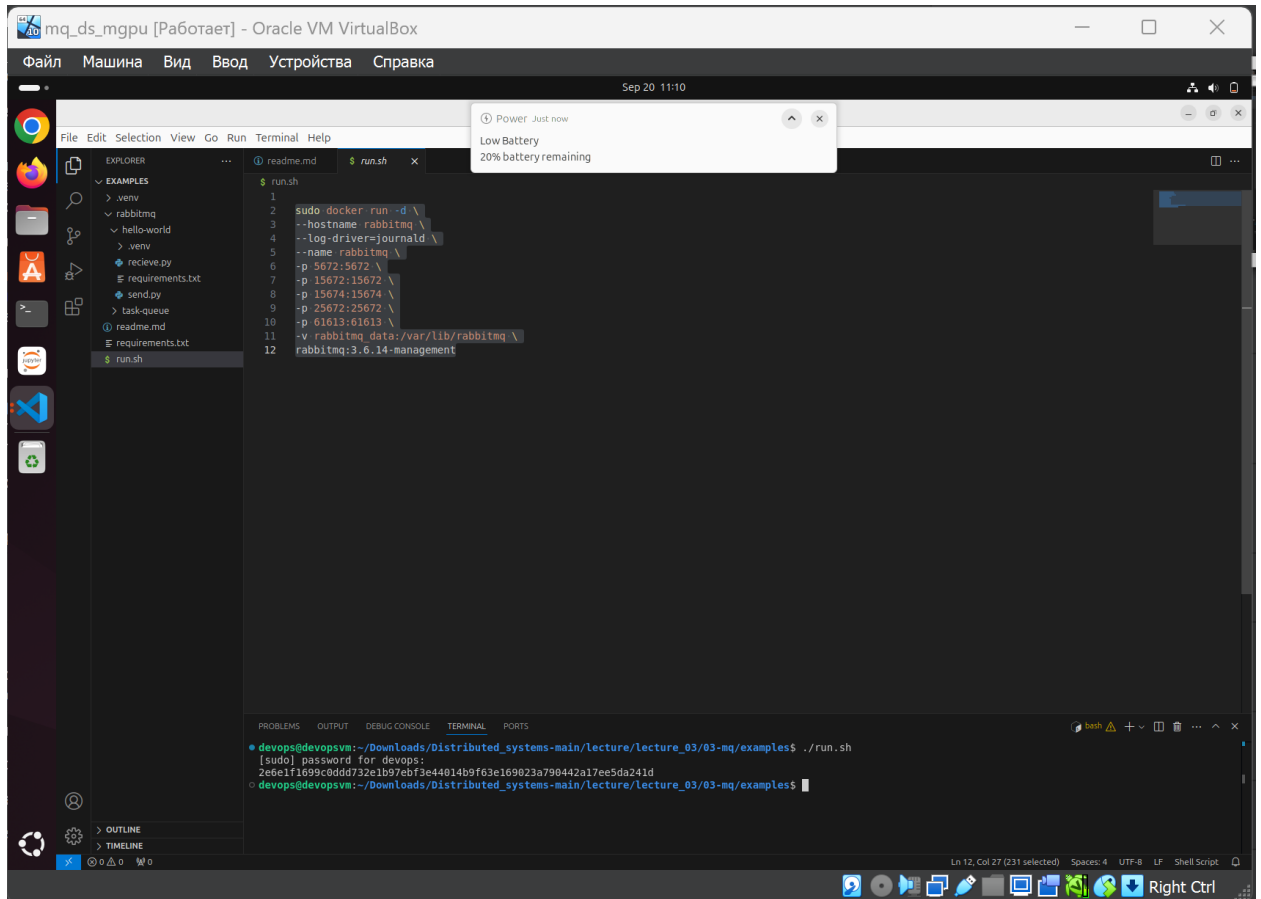
Выполнила: Тяпкина П.А., группа: АДЭУ-221

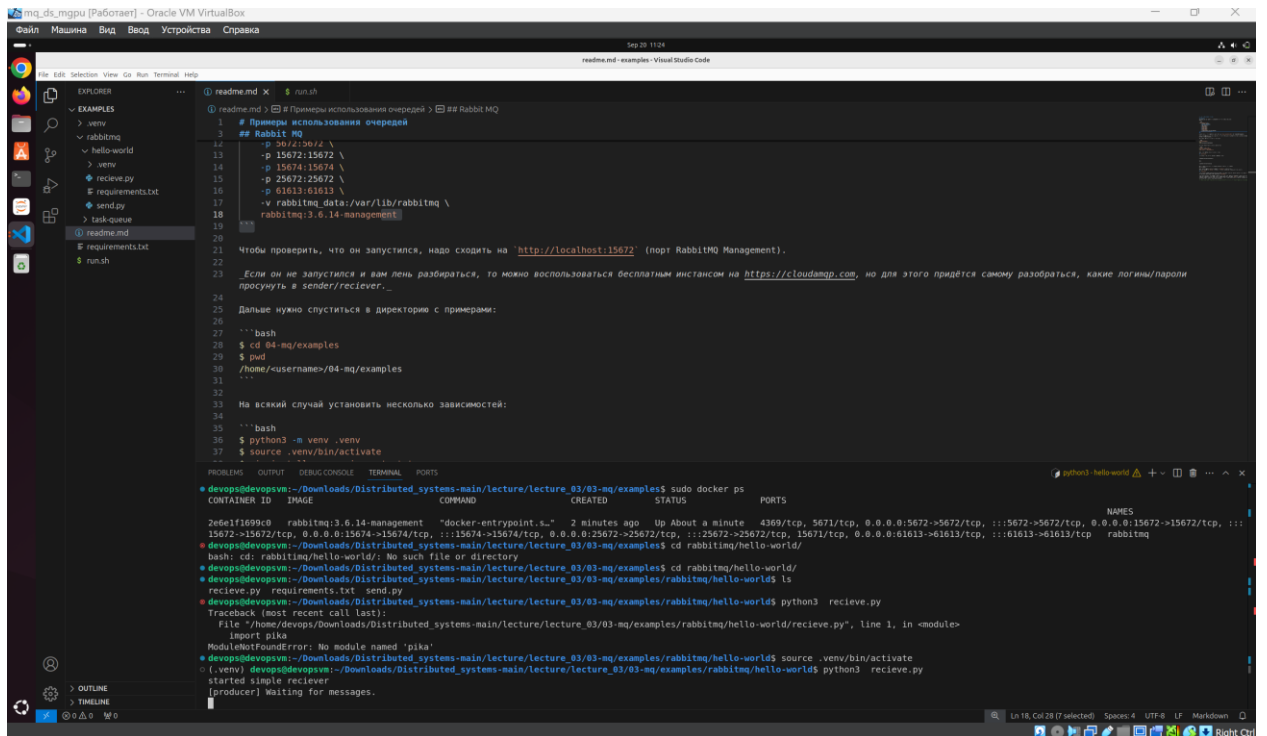
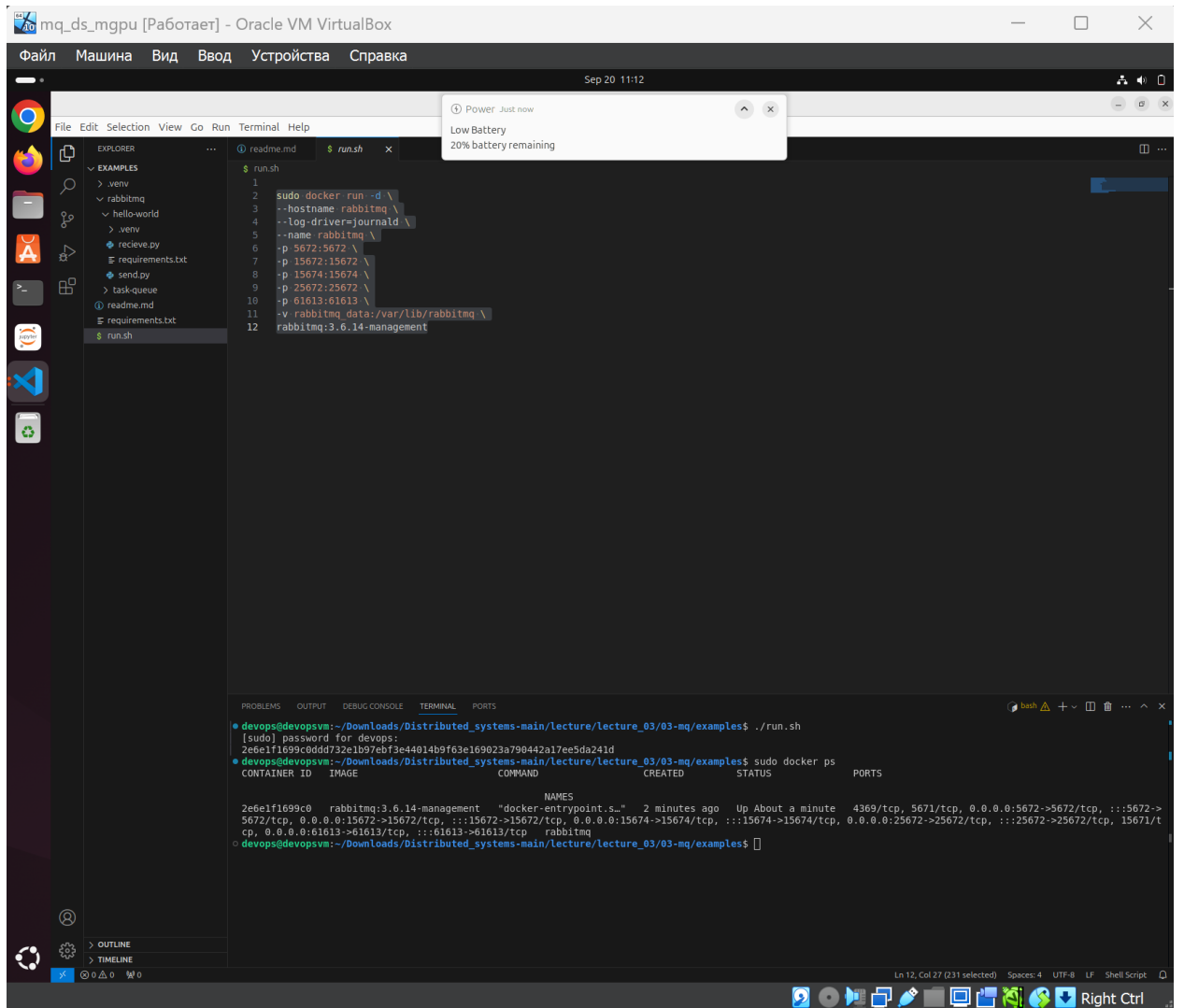
Преподаватель: Босенко Т.М.

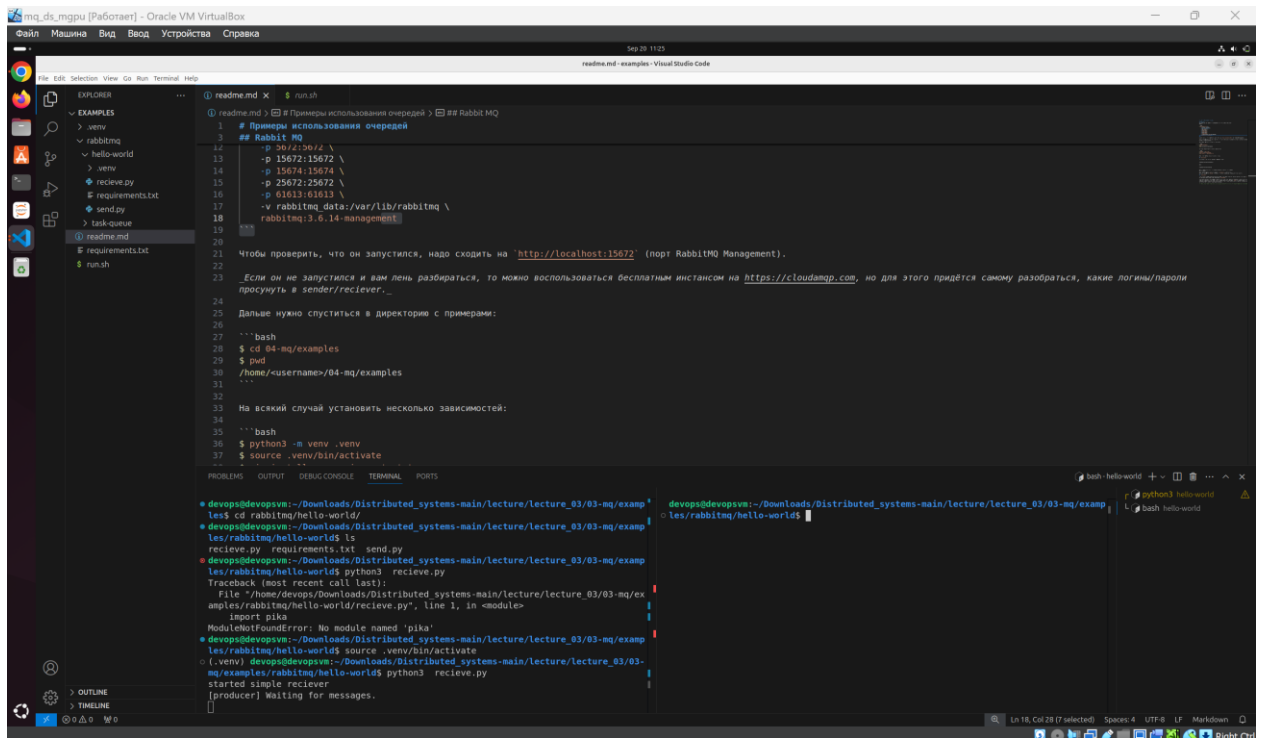
Москва

2024

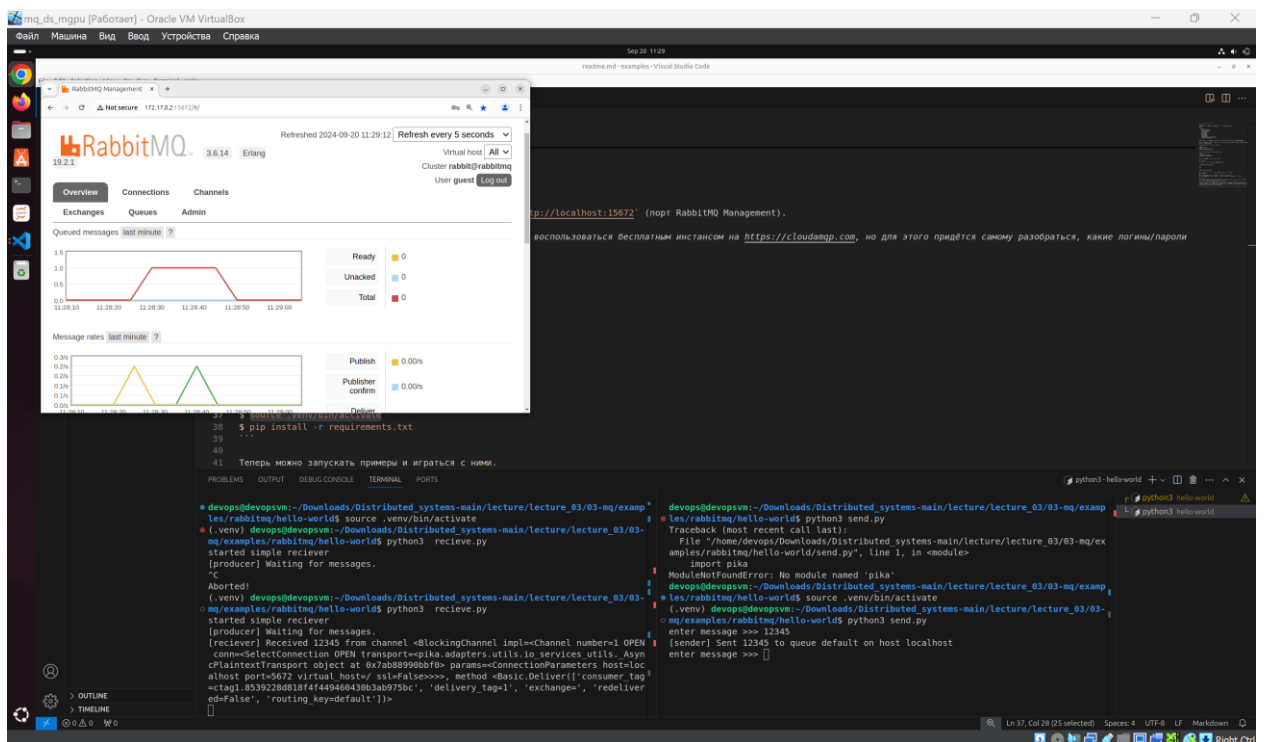
Начало работы:

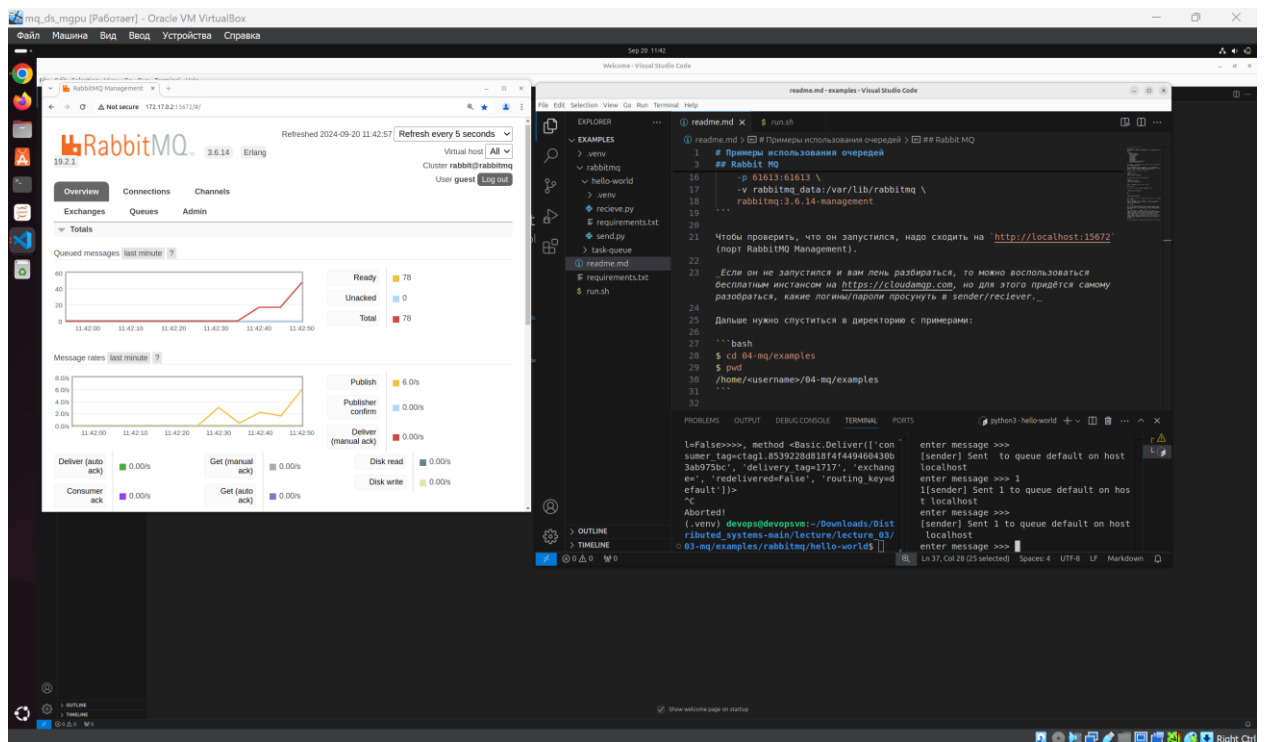






Отправитель-получатель:





Задание 2

dispatcher.py - examples - Visual Studio Code

File Edit Selection View Go Run Terminal Help

EXPLORER

- EXAMPLES
 - > .venv
 - > rabbitmq
 - > hello-world
 - > .venv
 - recieve.py
 - requirements.txt
 - send.py
 - task-queue
 - dispatcher.py
 - worker.py
 - readme.md
 - requirements.txt
 - run.sh

readme.md

dispatcher.py

```
1 import pika
2 import click
3
4 def do_send(host, queue, message):
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

python3 - task-queue

host localhost
enter message >>> 3[sender] Sent 22 to queue default on host localhost
enter message >>> 1
[sender] Sent 31 to queue default on host localhost
enter message >>> 3
[sender] Sent 3 to queue default on host localhost
enter message >>> 3
1[sender] Sent 3 to queue default on host localhost
2enter message >>>
[sender] Sent 12 to queue default on host localhost
enter message >>> 3
[sender] Sent 3 to queue default on host localhost
enter message >>> 12
[sender] Sent 12 to queue default on host localhost
3enter message >>>
[sender] Sent to queue default on host localhost
enter message >>> 1[sender] Sent 3 to queue default on host localhost
enter message >>>
3[sender] Sent 1 to queue default on host localhost

e or directory
devops@devopsvm:~/Downloads/Distributed_systems-main/lecture/lecture_03/03-mq/examples/rabbitmq\$ source .venv/bin/activate
bash: .venv/bin/activate: No such file or directory
devops@devopsvm:~/Downloads/Distributed_systems-main/lecture/lecture_03/03-mq/examples/rabbitmq\$ cd hello-world/
devops@devopsvm:~/Downloads/Distributed_systems-main/lecture/lecture_03/03-mq/examples/rabbitmq/hello-world\$ source .venv/bin/activate
(.venv) devops@devopsvm:~/Downloads/Distributed_systems-main/lecture/lecture_03/03-mq/examples/rabbitmq/hello-world\$ cd task-queue/
(.venv) devops@devopsvm:~/Downloads/Distributed_systems-main/lecture/lecture_03/03-mq/examples/rabbitmq/task-queue\$ python3 worker.py
started simple worker
[worker] Waiting for messages.
[worker] Received command '['1']' from channel default, method <class 'pika.spec.Basic.Deliver'>
[worker] Executing command

```
300 cd rabbitmq/hello-world/task-queue/
301 cd rabbitmq/hello-world/
302 ls
303 python3 recieve.py
304 cd task-queue/
305 cd task-queue /
306 cd ..
307 cd task-queue/
308 python3 dispatcher.py
309* source .venv/bin/activate
310 cd ..
311 cd hello-world/
312 source .venv/bin/activate
313 cd ..
314 cd task-queue/
315 python3 dispatcher.py
316 history
(.venv) devops@devopsvm:~/Downloads/Distributed_systems-main/lecture/lecture_03/03-mq/examples/rabbitmq/task-queue$

288 sudo docker ps
289 cd rabbitmq/hello-world/
290 cd rabbitmq/hello-world/
291 ls
292 python3 recieve.py
293 source .venv/bin/activate
294 python3 recieve.py
295 cd rabbitmq/hello-world/task-queue
296 exit
297 python3 worker.py
298 cd ..
299 cd rabbitmq/hello-world/
300 source .venv/bin/activate
301 cd hello-world/
302 source .venv/bin/activate
303 cd ..
304 cd task-queue/
305 python3 worker.py
306 history
(.venv) devops@devopsvm:~/Downloads/Distributed_systems-main/lecture/lecture_03/03-mq/examples/rabbitmq/task-queue$
```

mq_ds_mgpr [Рабочий] - Oracle VM VirtualBox

File Machine View Ввод Устройства Справка

Sep 20 13:28

RabbitMQ Management 19.2.1 3.6.14 Erlang

Refreshed 2024-09-20 13:26:27 Refresh every 5 seconds

Virtual host: All Cluster rabbit/rabbitmq User guest Log out

Overview Connections Channels

Exchanges Queues Admin

Totals

Queued messages last minute

Ready 0 Unacked 0 Total 0

Message rates last minute

Deliver (auto ack) 0.00% Get (manual ack) 0.00% Publish 0.00% Deliver (manual ack) 0.00% Consumer ack 0.00% Get (auto ack) 0.00% Disk read 0.00% Disk write 0.00%

dispatcher-examples - Visual Studio Code

```
1 import pika
2 import click
3
4 def do_send(host, queue, message):
5     connection = pika.BlockingConnection(pika.ConnectionParameters(host))
6     channel = connection.channel()
7
8     channel.queue_declare(queue=queue)
9
10    channel.basic_publish(exchange='', routing_key=queue, body=message)
11    print(f'[sender] Sent {message} to queue {queue} on host {host}')
12    connection.close()
13
14 def run_send(host, queue, message):
15     if message:
16         do_send(host, queue, message)
17     else:
18         while True:
19             message = input("enter message >>> ")
20             do_send(host, queue, message)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

bash-task-queue

[sender] Sent df to queue default on host localhost
enter message >>>
[sender] Sent to queue default on host localhost
enter message >>> e
[sender] Sent ge to queue default on host localhost
enter message >>> q

consumer_info.on_message_callback(self, evt.method, File "/home/devops/Downloads/Distributed Systems-main/lecture/lecture_03/03-mq/example_s/rabbitmq/task-queue/worker.py", line 11, in callback
if command[0] == "print":
IndexError: list index out of range (.venv) devops@devopsma:~/Downloads/Distributed Systems-main/lecture/lecture_03/03-mq/example_s/rabbitmq/task-queues

mq_ds_mgpr [Рабочий] - Oracle VM VirtualBox

File Machine View Ввод Устройства Справка

Sep 20 13:28

RabbitMQ Management 19.2.1 3.6.14 Erlang

Refreshed 2024-09-20 13:28:17 Refresh every 5 seconds

Virtual host: All Cluster rabbit/rabbitmq User guest Log out

Overview Connections Channels

Exchanges Queues Admin

Totals

Queued messages last minute

Ready 195 Unacked 0 Total 195

Message rates last minute

Deliver (auto ack) 0.00% Get (manual ack) 0.00% Publish 8.6% Deliver (manual ack) 0.00% Consumer ack 0.00% Get (auto ack) 0.00% Disk read 0.00% Disk write 0.00%

dispatcher-examples - Visual Studio Code

```
1 import pika
2 import click
3
4 def do_send(host, queue, message):
5     connection = pika.BlockingConnection(pika.ConnectionParameters(host))
6     channel = connection.channel()
7
8     channel.queue_declare(queue=queue)
9
10    channel.basic_publish(exchange='', routing_key=queue, body=message)
11    print(f'[sender] Sent {message} to queue {queue} on host {host}')
12    connection.close()
13
14 def run_send(host, queue, message):
15     if message:
16         do_send(host, queue, message)
17     else:
18         while True:
19             message = input("enter message >>> ")
20             do_send(host, queue, message)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

python-task-queue

[sender] Sent f to queue default on host localhost
enter message >>>
[sender] Sent s to queue default on host localhost
enter message >>> e
[sender] Sent f to queue default on host localhost
enter message >>> s
[sender] Sent ds to queue default on host localhost
enter message >>>

consumer_info.on_message_callback(self, evt.method, File "/home/devops/Downloads/Distributed Systems-main/lecture/lecture_03/03-mq/example_s/rabbitmq/task-queue/worker.py", line 11, in callback
if command[0] == "print":
IndexError: list index out of range (.venv) devops@devopsma:~/Downloads/Distributed Systems-main/lecture/lecture_03/03-mq/example_s/rabbitmq/task-queues

VScode на данном моменте не выдержал нагрузки с 2 терминалов, с которых поступали сообщения и выдал ошибку, закрыв окно.

