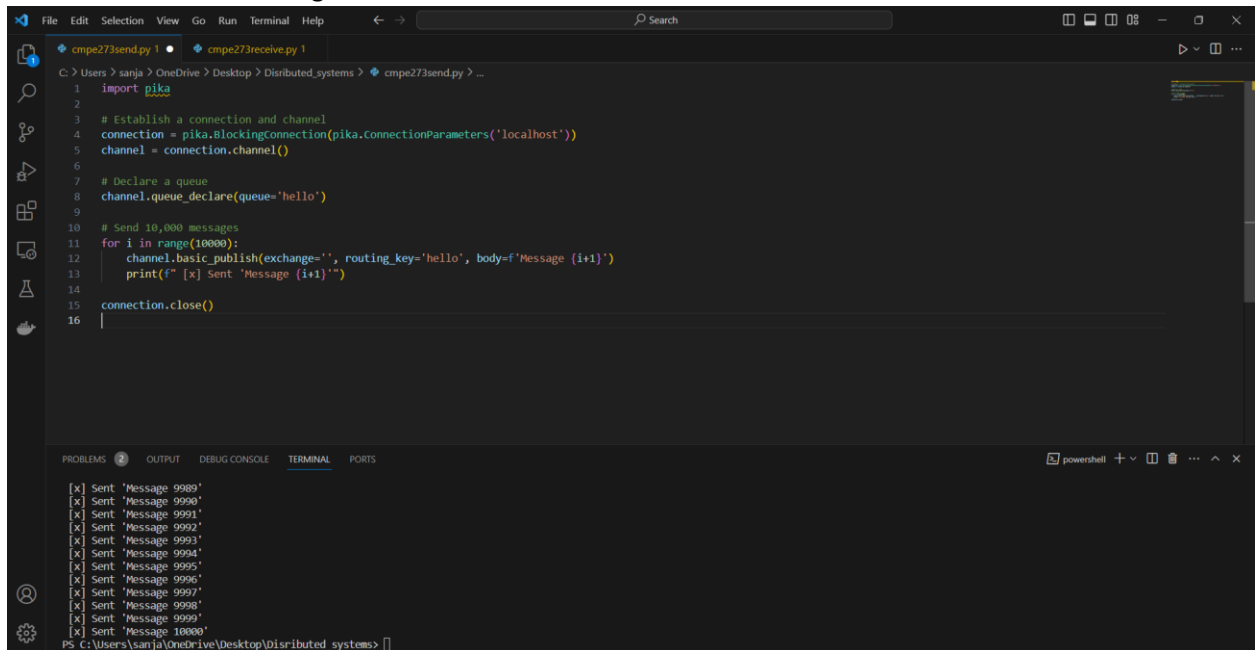


Assignment-3 (Distributed Systems)

- Installed RabbitMQ .
- Run Sender Py file.
- Sender sent 10000 messages to receiver



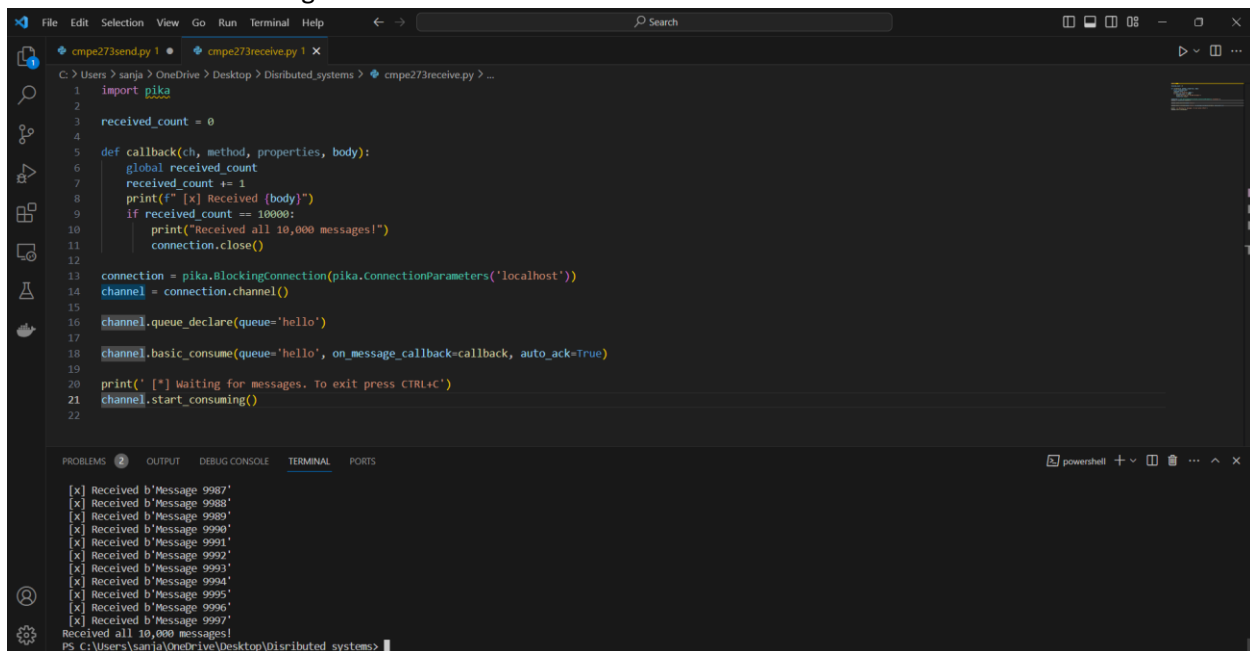
The screenshot shows a VS Code editor with a file named `cmpe273send.py` open. The code is as follows:

```
1 import pika
2
3 # Establish a connection and channel
4 connection = pika.BlockingConnection(pika.ConnectionParameters('localhost'))
5 channel = connection.channel()
6
7 # Declare a queue
8 channel.queue_declare(queue='hello')
9
10 # Send 10,000 messages
11 for i in range(10000):
12     channel.basic_publish(exchange='', routing_key='hello', body=f'Message {i+1}')
13     print(f"[x] Sent 'Message {i+1}'")
14
15 connection.close()
16
```

The terminal output shows the execution of the script, displaying the first 10 messages sent:

```
[x] Sent 'Message 9989'
[x] Sent 'Message 9990'
[x] Sent 'Message 9991'
[x] Sent 'Message 9992'
[x] Sent 'Message 9993'
[x] Sent 'Message 9994'
[x] Sent 'Message 9995'
[x] Sent 'Message 9996'
[x] Sent 'Message 9997'
[x] Sent 'Message 9998'
[x] Sent 'Message 9999'
[x] Sent 'Message 10000'
```

Receiver Receives Messages



The screenshot shows a VS Code editor with a file named `cmpe273receive.py` open. The code is as follows:

```
1 import pika
2
3 received_count = 0
4
5 def callback(ch, method, properties, body):
6     global received_count
7     received_count += 1
8     print(f"[x] Received {body}")
9     if received_count == 10000:
10         print("Received all 10,000 messages!")
11         connection.close()
12
13 connection = pika.BlockingConnection(pika.ConnectionParameters('localhost'))
14 channel = connection.channel()
15
16 channel.queue_declare(queue='hello')
17
18 channel.basic_consume(queue='hello', on_message_callback=callback, auto_ack=True)
19
20 print(' [*] Waiting for messages. To exit press CTRL+C')
21 channel.start_consuming()
22
```

The terminal output shows the execution of the script, displaying the first 10 messages received:

```
[x] Received b'Message 9989'
[x] Received b'Message 9990'
[x] Received b'Message 9991'
[x] Received b'Message 9992'
[x] Received b'Message 9993'
[x] Received b'Message 9994'
[x] Received b'Message 9995'
[x] Received b'Message 9996'
[x] Received b'Message 9997'
Received all 10,000 messages!
```

We can see the no of messaged queues in RabbitMQ

