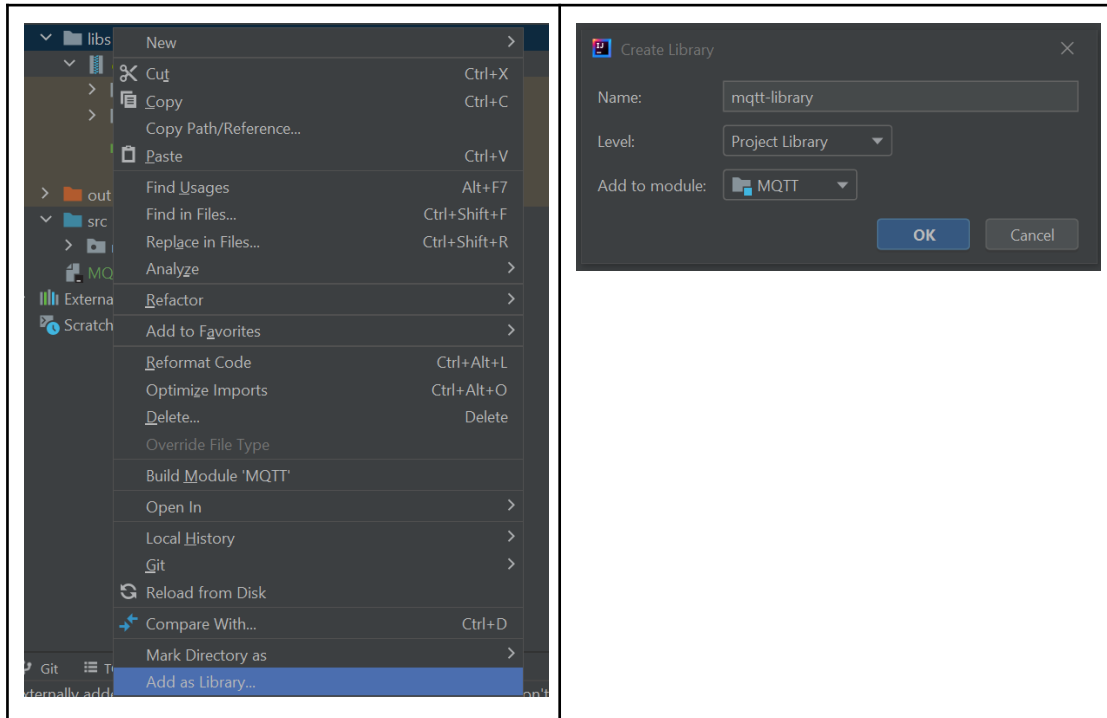
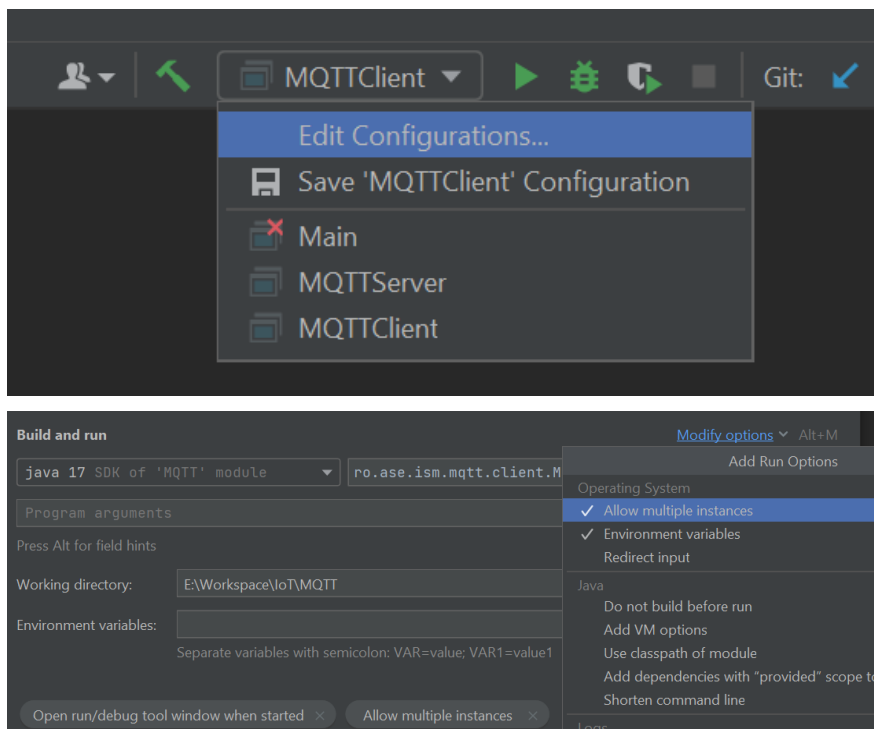


MQTT Implementation

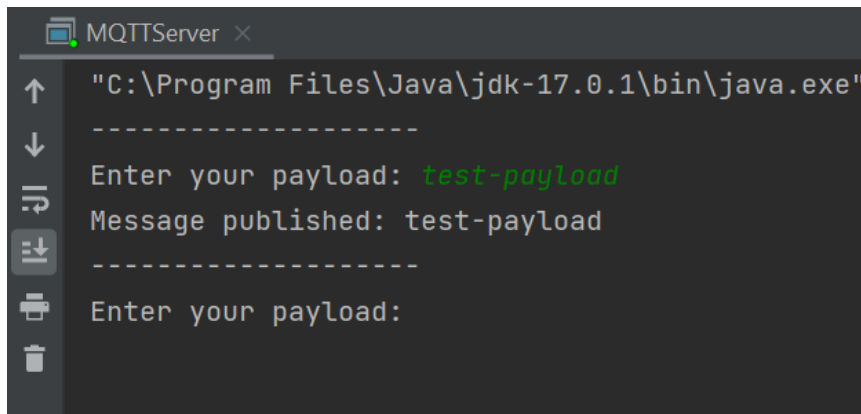
1. Open the project in IntelliJ.
2. Right click on the “libs” folder to add it as a library.



3. Set the configuration to allow multiple instances of a client.

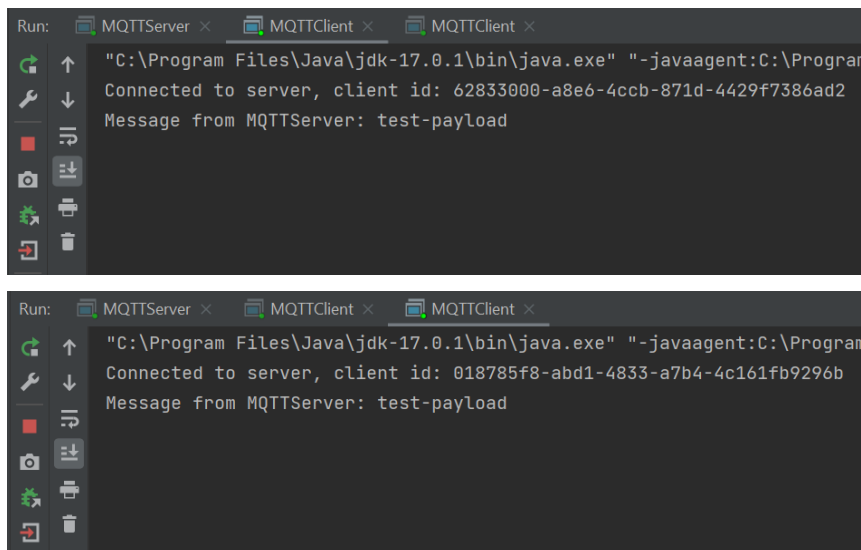


- Run **MQTTServert.main()** and enter a payload .
Algorithm used: AES/CBC/PKCS5Padding



```
MQTTServert
"C:\Program Files\Java\jdk-17.0.1\bin\java.exe"
-----
Enter your payload: test-payload
Message published: test-payload
-----
Enter your payload:
```

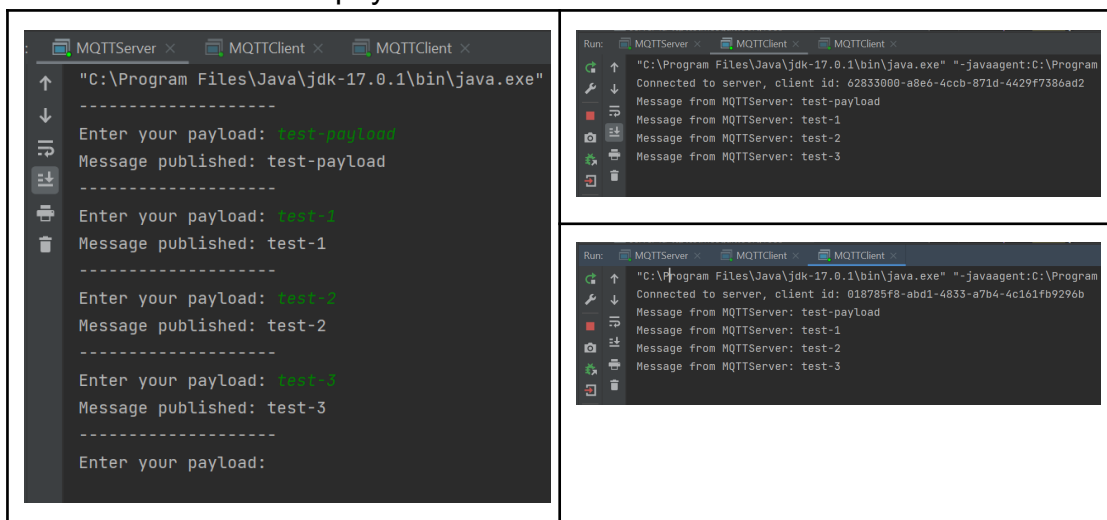
- Run one or more instances of **MQTTClient.main()**.



```
Run: MQTTServert x MQTTClient x MQTTClient x
"C:\Program Files\Java\jdk-17.0.1\bin\java.exe" "-javaagent:C:\Program
Connected to server, client id: 62833000-a8e6-4ccb-871d-4429f7386ad2
Message from MQTTServert: test-payload

Run: MQTTServert x MQTTClient x MQTTClient x
"C:\Program Files\Java\jdk-17.0.1\bin\java.exe" "-javaagent:C:\Program
Connected to server, client id: 018785f8-abd1-4833-a7b4-4c161fb9296b
Message from MQTTServert: test-payload
```

- The clients receive the payloads.



```
MQTTServert x MQTTClient x MQTTClient x
"C:\Program Files\Java\jdk-17.0.1\bin\java.exe"
-----
Enter your payload: test-payload
Message published: test-payload
-----
Enter your payload: test-1
Message published: test-1
-----
Enter your payload: test-2
Message published: test-2
-----
Enter your payload: test-3
Message published: test-3
-----
Enter your payload:

Run: MQTTServert x MQTTClient x MQTTClient x
"C:\Program Files\Java\jdk-17.0.1\bin\java.exe" "-javaagent:C:\Program
Connected to server, client id: 62833000-a8e6-4ccb-871d-4429f7386ad2
Message from MQTTServert: test-payload
Message from MQTTServert: test-1
Message from MQTTServert: test-2
Message from MQTTServert: test-3

Run: MQTTServert x MQTTClient x MQTTClient x
"C:\Program Files\Java\jdk-17.0.1\bin\java.exe" "-javaagent:C:\Program
Connected to server, client id: 018785f8-abd1-4833-a7b4-4c161fb9296b
Message from MQTTServert: test-payload
Message from MQTTServert: test-1
Message from MQTTServert: test-2
Message from MQTTServert: test-3
```

- In this example, the messages are encrypted and published, then the clients (subscribers) receive and decrypt it.