Practica 10: Protocolos de mercado QuickFix y sesionesFix

Parte 1: Introducción a QuickFix

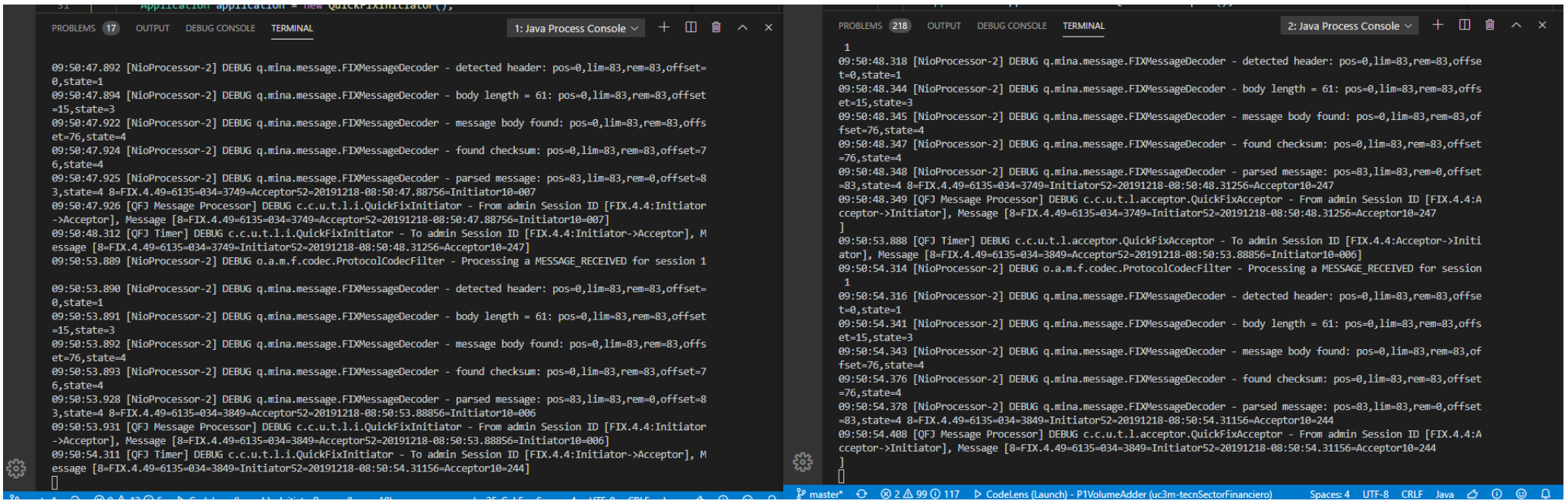
Sesión creada en el Acceptor:

```
20191217-23:27:37: Session FIX.4.4:Acceptor->Initiator schedule is daily, 00:00:00-UTC - 00:00:00-UTC
20191217-23:27:37: Created session: FIX.4.4:Acceptor->Initiator
20191217-23:28:21: Accepting session FIX.4.4:Acceptor->Initiator from /127.0.0.1:54012
20191217-23:28:21: Acceptor heartbeat set to 6 seconds
20191217-23:28:21: Logon contains ResetSeqNumFlag=Y, resetting sequence numbers to 1
20191217-23:28:21: Received logon
20191217-23:28:21: Responding to Logon request
```

Sesión creada en el Initiator:

```
20191218-08:47:09: Session FIX.4.4:Initiator->Acceptor schedule is daily, 00:00:00-UTC - 00:00:00-UTC
20191218-08:47:09: Session state is not current; resetting FIX.4.4:Initiator->Acceptor
20191218-08:47:09: Created session: FIX.4.4:Initiator->Acceptor
20191218-08:47:11: Initiated logon request
20191218-08:47:11: Logon contains ResetSeqNumFlag=Y, resetting sequence numbers to 1
20191218-08:47:11: Received logon
```

Comunicación entre Acceptor e Initiator:



Parte 2: Reproducir el error

A continuación, se para el Initiator y se vuelve a lanzar. Posterior en el event log del Acceptor se ve la desconexion del Initiator

```
20191218-
08:53:01: Disconnecting: Socket exception (/127.0.0.1:54392): java.io.IOException: An existing connection was forcibly closed by the remote host
```

```
20191218-08:53:16: MsgSeqNum too high, expecting 1 but received 60: 8=FIX.4.49=7235=A34=6049=Initiator52=20191218-08:53:16.51956=Acceptor98=0108=610=249
20191218-08:53:16: Enqueued at pos 60: 8=FIX.4.49=7235=A34=6049=Initiator52=20191218-08:53:16.51956=Acceptor98=0108=610=249
```

Esto es debido a que la sesión esta abierta por el socket y se enumeran los mensajes como garantía de comunicación, una vez se interrumpe el envío y se reinicia el Initiator, la validación se rompe y fuerza a reiniciar el numero de secuencia entre el destinatario y el receptor.

Práctica 3: Reproducir una subscripción a datos de mercado

A continuación, una simulación de mensajes recibidos por el subscriptor

```
13:02:18.30856=Initiator262=Test 1268=1279=0269=255=BBVA270=1.510=058
14:02:18.369 [QFJ Message Processor] DEBUG c.c.u.t.l.m.MarketDataSubscriber - --------New message received---------- Prices [270=1.5]
14:02:20.176 [QFJ Timer] DEBUG c.c.u.t.l.m.MarketDataSubscriber - To admin Session ID [FIX.4.4:Initiator->Acceptor], Message [8=FIX.4.49=6035=034=349=Initiator52=20191218-13
:02:20.17656=Acceptor10=182]
14:02:20.312 [NioProcessor-2] DEBUG o.a.m.f.codec.ProtocolCodecFilter - Processing a MESSAGE_RECEIVED for session 1
14:02:20.313 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - detected header: pos=0,lim=129,rem=129,offset=0,state=1
14:02:20.314 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - body length = 106: pos=0,lim=129,rem=129,offset=16,state=3
14:02:20.315 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - message body found: pos=0,lim=129,rem=129,offset=122,state=4
14:02:20.316 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - found checksum: pos=0,lim=129,rem=129,offset=122,state=4
14:02:20.317 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - parsed message: pos=129,lim=129,rem=0,offset=129,state=4 8=FIX.4.49=10635=X34=549=Acceptor52=20191218-
13:02:20.30856=Initiator262=Test 1268=1279=0269=255=BBVA270=10.110=097
14:02:20.318 [QFJ Message Processor] DEBUG c.c.u.t.l.m.MarketDataSubscriber - --------New message received---------- Prices [270=10.1]
14:02:23.312 [NioProcessor-2] DEBUG o.a.m.f.codec.ProtocolCodecFilter - Processing a MESSAGE_RECEIVED for session 1
14:02:23.312 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - detected header: pos=0,lim=129,rem=129,offset=0,state=1
14:02:23.313 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - body length = 106: pos=0,lim=129,rem=129,offset=16,state=3
14:02:23.314 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - message body found: pos=0,lim=129,rem=129,offset=122,state=4
14:02:23.314 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - found checksum: pos=0,lim=129,rem=129,offset=122,state=4
14:02:23.314 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - parsed message: pos=129,lim=129,rem=0,offset=129,state=4 8=FIX.4.49=10635=X34=649=Acceptor52=20191218-
13:02:23.30856=Initiator262=Test 1268=1279=0269=255=BBVA270=10.210=102
14:02:23.316 [QFJ Message Processor] DEBUG c.c.u.t.l.m.MarketDataSubscriber - --------New message received---------- Prices [270=10.2]
14:02:26.179 [QFJ Timer] DEBUG c.c.u.t.l.m.MarketDataSubscriber - To admin Session ID [FIX.4.4:Initiator->Acceptor], Message [8=FIX.4.49=6035=034=449=Initiator52=20191218-13
:02:26.17956=Acceptor10=192]
14:02:28.310 [NioProcessor-2] DEBUG o.a.m.f.codec.ProtocolCodecFilter - Processing a MESSAGE_RECEIVED for session 1
14:02:28.310 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - detected header: pos=0,lim=129,rem=129,offset=0,state=1
14:02:28.312 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - body length = 106: pos=0,lim=129,rem=129,offset=16,state=3
14:02:28.317 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - message body found: pos=0,lim=129,rem=129,offset=122,state=4
14:02:28.318 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - found checksum: pos=0,lim=129,rem=129,offset=122,state=4
14:02:28.319 [NioProcessor-2] DEBUG q.mina.message.FIXMessageDecoder - parsed message: pos=129,lim=129,rem=0,offset=129,state=4 8=FIX.4.49=10635=X34=749=Acceptor52=20191218-
13:02:28.30756=Initiator262=Test 1268=1279=0269=255=BBVA270=10.310=108
14:02:28.322 [QFJ Message Processor] DEBUG c.c.u.t.l.m.MarketDataSubscriber - --------New message received---------- Prices [270=10.3]
14:02:32.180 [QFJ Timer] DEBUG c.c.u.t.l.m.MarketDataSubscriber - To admin Session ID [FIX.4.4:Initiator->Acceptor], Message [8=FIX.4.49=6035=034=549=Initiator52=20191218-13
:02:32.18056=Acceptor10=182]
```