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| **Assignment No – 6**  **Title: To develop any distributed application using Messaging System in Publish-Subscribe paradigm.**  **Batch: 2 Roll No:** |

**1. Publisher.java**

**package pubsub;**

**import javax.jms.\*;**

**import org.apache.activemq.ActiveMQConnection;**

**import org.apache.activemq.ActiveMQConnectionFactory;**

**public class Publisher {**

**private static String url = ActiveMQConnection.DEFAULT\_BROKER\_URL;**

**public static void main(String[] args) throws JMSException {**

**ConnectionFactory connectionFactory = new ActiveMQConnectionFactory(url);**

**Connection connection = connectionFactory.createConnection();**

**connection.start();**

**// JMS messages are sent and received using a Session. We will**

**// create here a non-transactional session object. If you want**

**// to use transactions you should set the first parameter to 'true'**

**Session session = connection.createSession(false, Session.AUTO\_ACKNOWLEDGE);**

**Topic topic = session.createTopic("CL9");**

**MessageProducer producer = session.createProducer(topic);**

**// We will send a small text message saying 'Hello'**

**TextMessage message = session.createTextMessage();**

**message.setText("This is a new message from publisher");**

**// Here we are sending the message!**

**producer.send(message);**

**System.out.println("Sent message '" + message.getText() + "'");**

**connection.close();**

**}**

**}**

**2. Subscriber.java**

**package pubsub;**

**import java.io.IOException;**

**import javax.jms.\*;**

**import org.apache.activemq.ActiveMQConnection;**

**import org.apache.activemq.ActiveMQConnectionFactory;**

**public class Subscriber {**

**// URL of the JMS server**

**private static String url = ActiveMQConnection.DEFAULT\_BROKER\_URL;**

**// Name of the topic from which we will receive messages from = " CL9"**

**public static void main(String[] args) throws JMSException {**

**// Getting JMS connection from the server**

**ConnectionFactory connectionFactory = new ActiveMQConnectionFactory(url);**

**Connection connection = connectionFactory.createConnection();**

**connection.start();**

**Session session = connection.createSession(false, Session.AUTO\_ACKNOWLEDGE);**

**Topic topic = session.createTopic("CL9");**

**MessageConsumer consumer = session.createConsumer(topic);**

**MessageListener listner = new MessageListener() {**

**public void onMessage(Message message) {**

**try {**

**if (message instanceof TextMessage) {**

**TextMessage textMessage = (TextMessage) message;**

**System.out.println("Received message" + textMessage.getText() + "'");**

**}**

**} catch (JMSException e) {**

**System.out.println("Caught:" + e);**

**e.printStackTrace();**

**}**

**}**

**};**

**consumer.setMessageListener(listner);**

**try {**

**System.in.read();**

**} catch (IOException e) {**

**e.printStackTrace();**

**}**

**connection.close();**

**}**

**}**

**Output::**

**Run the command:**

**sudo sh avtivemq start**

**it@IT-MMT-09:~/PublisherSubscriber/apache-activemq-5.15.8-bin/apache-activemq-5.15.8/bin$ sudo sh activemq start**

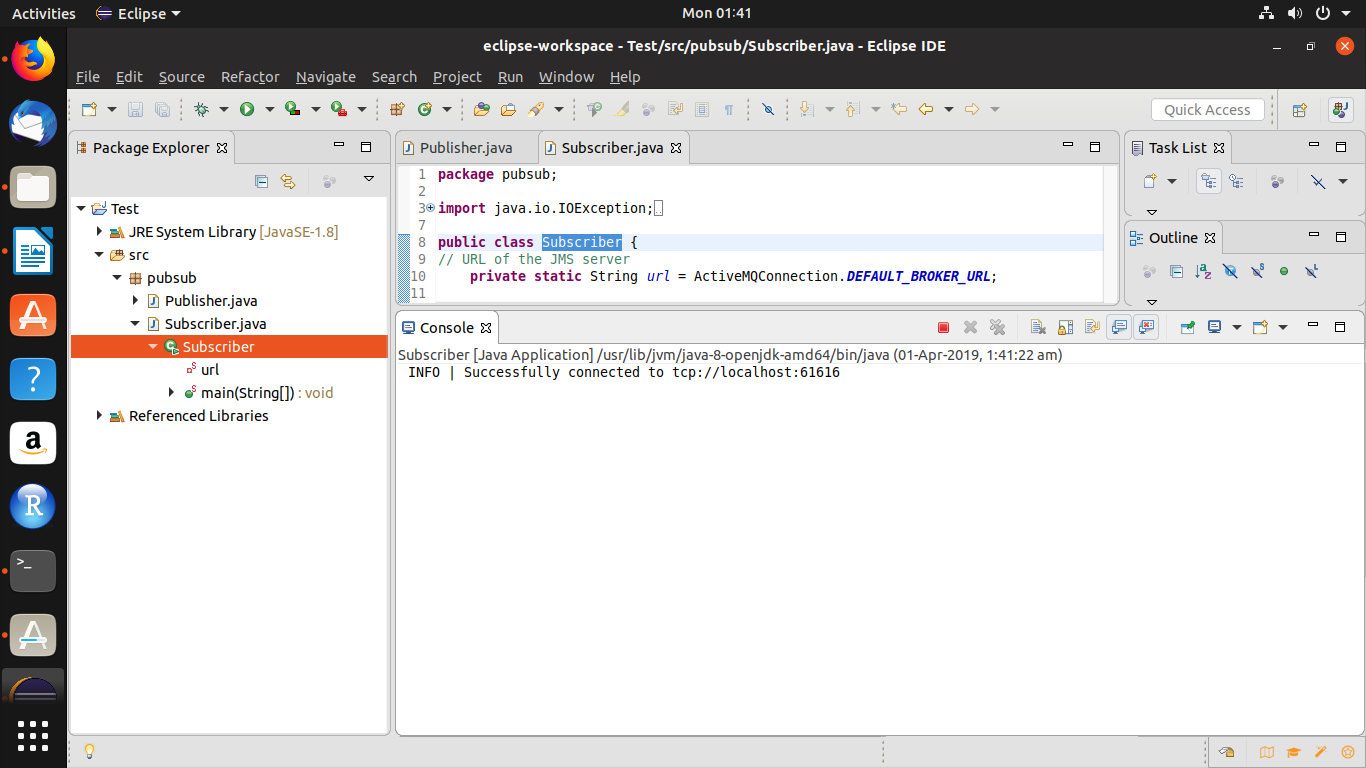
**[sudo] password for it:**

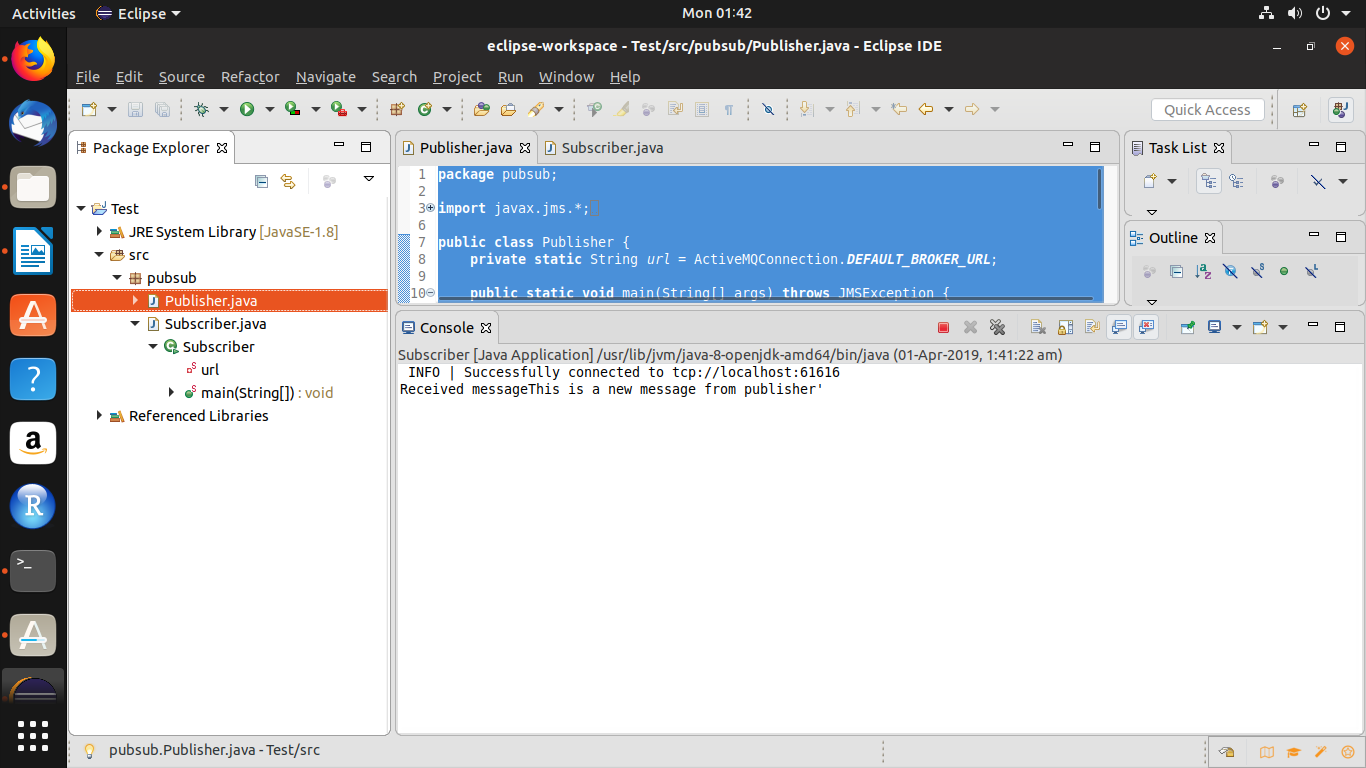
**INFO: Loading '/home/it/PublisherSubscriber/apache-activemq-5.15.8-bin/apache-activemq-5.15.8//bin/env'**

**INFO: Using java '/usr/bin/java'**

**INFO: Starting - inspect logfiles specified in logging.properties and log4j.properties to get details**

**INFO: pidfile created : '/home/it/PublisherSubscriber/apache-activemq-5.15.8-bin/apache-activemq-5.15.8//data/activemq.pid' (pid '5193')**

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