

Date: 12/20/16

Tester: Mamadou Diao Bah (badiawo@gmail.com)

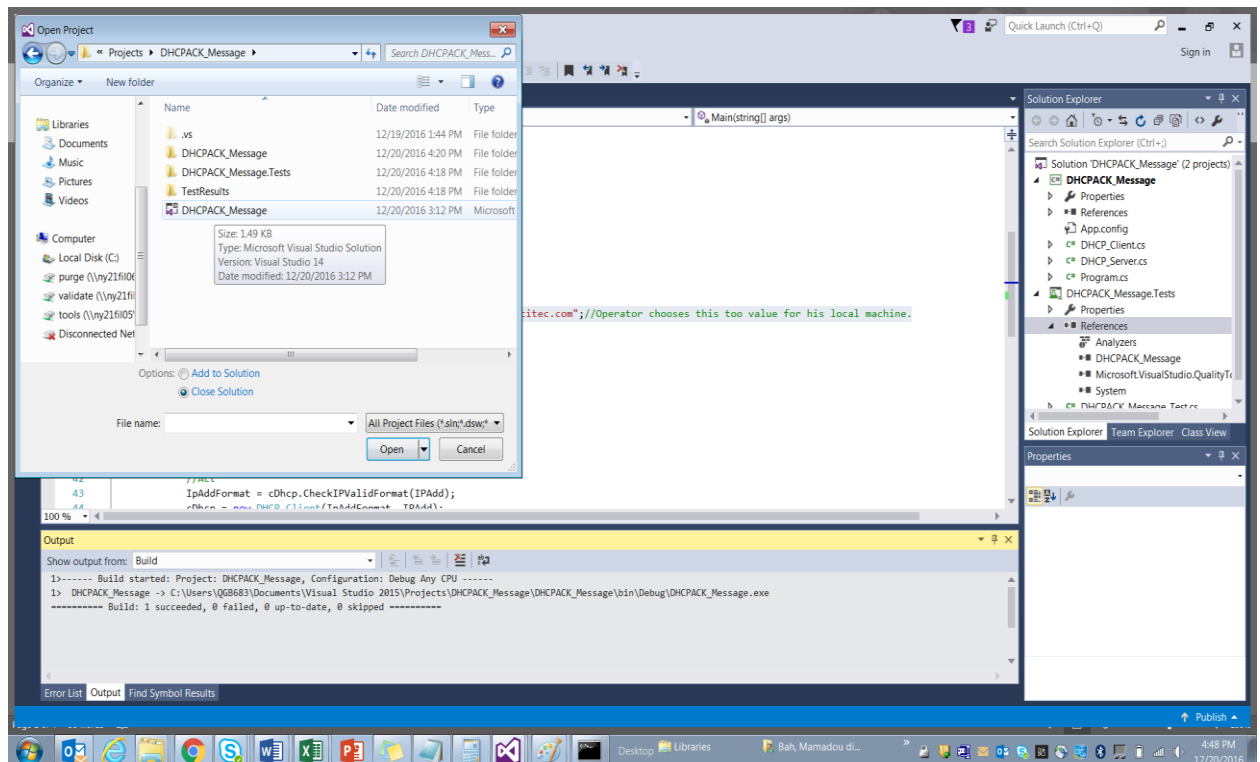
Project: DHCP Simulator

Scope of the project

This program is written to simulate the communication process between a DHCP client requesting an IP address from a DHCP server in order to communicate within a network. This is a simplified version of the project, some improvement can be applied by using: UDP socket library (IPEndPoint and UdpClient) for the communication between the client and server and Ping library in order to confirm that the allocated library is part of the network and is free (available).

1. How to Open the Project with VS2015

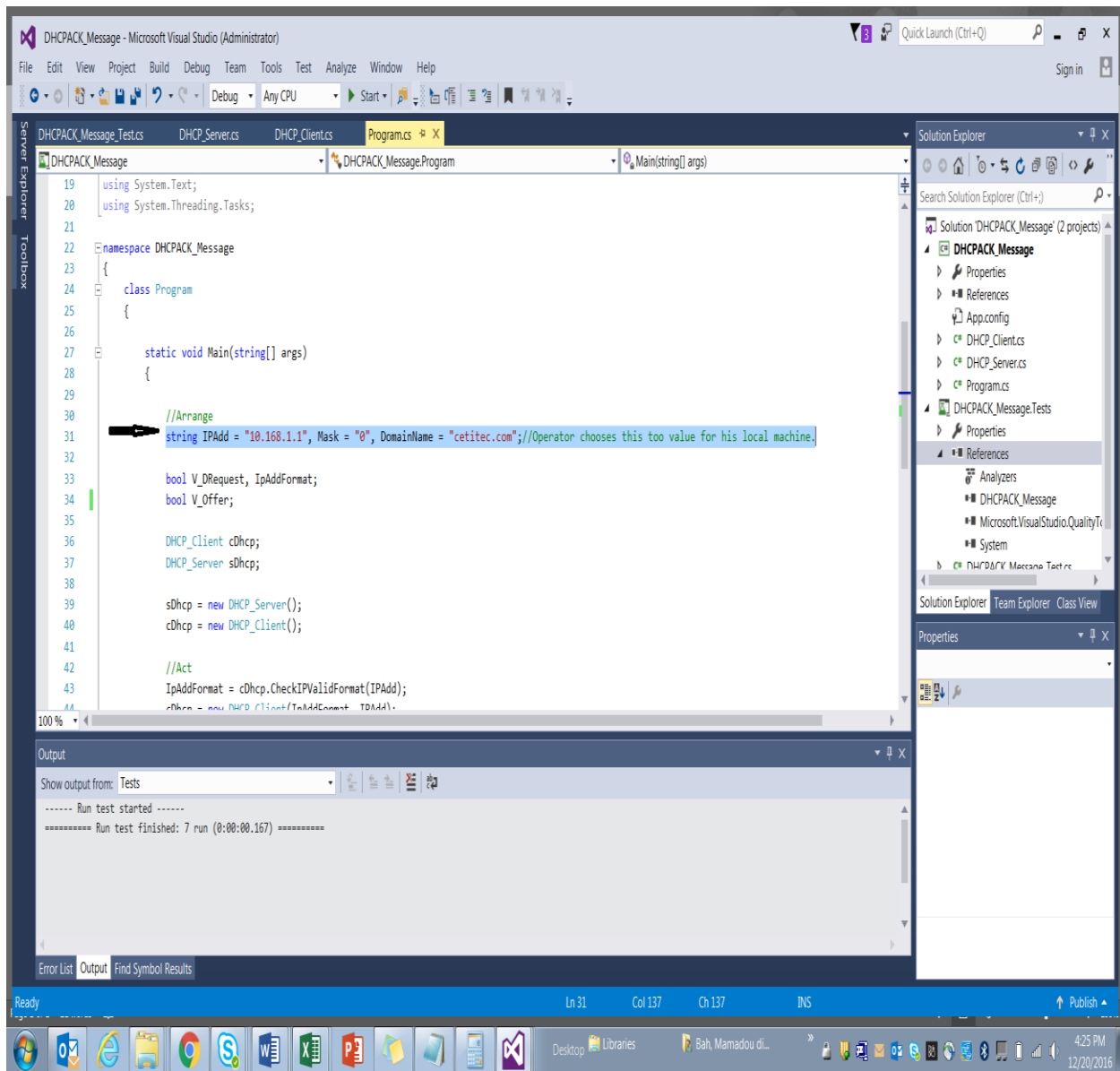
After unzipping the project, select the File tab → Open Project and choose the file indicated into the below picture.



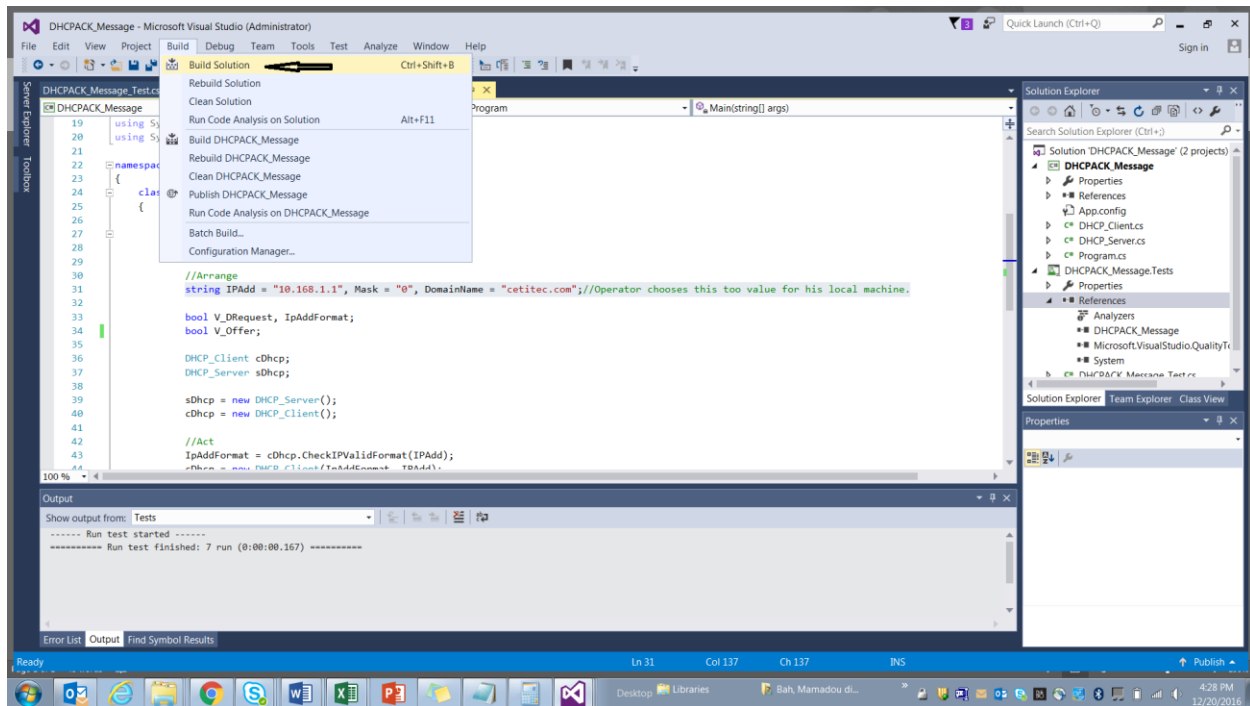
2. How to run the DHCP program:

Step1: Go to the Program.cs tab (check the picture below)

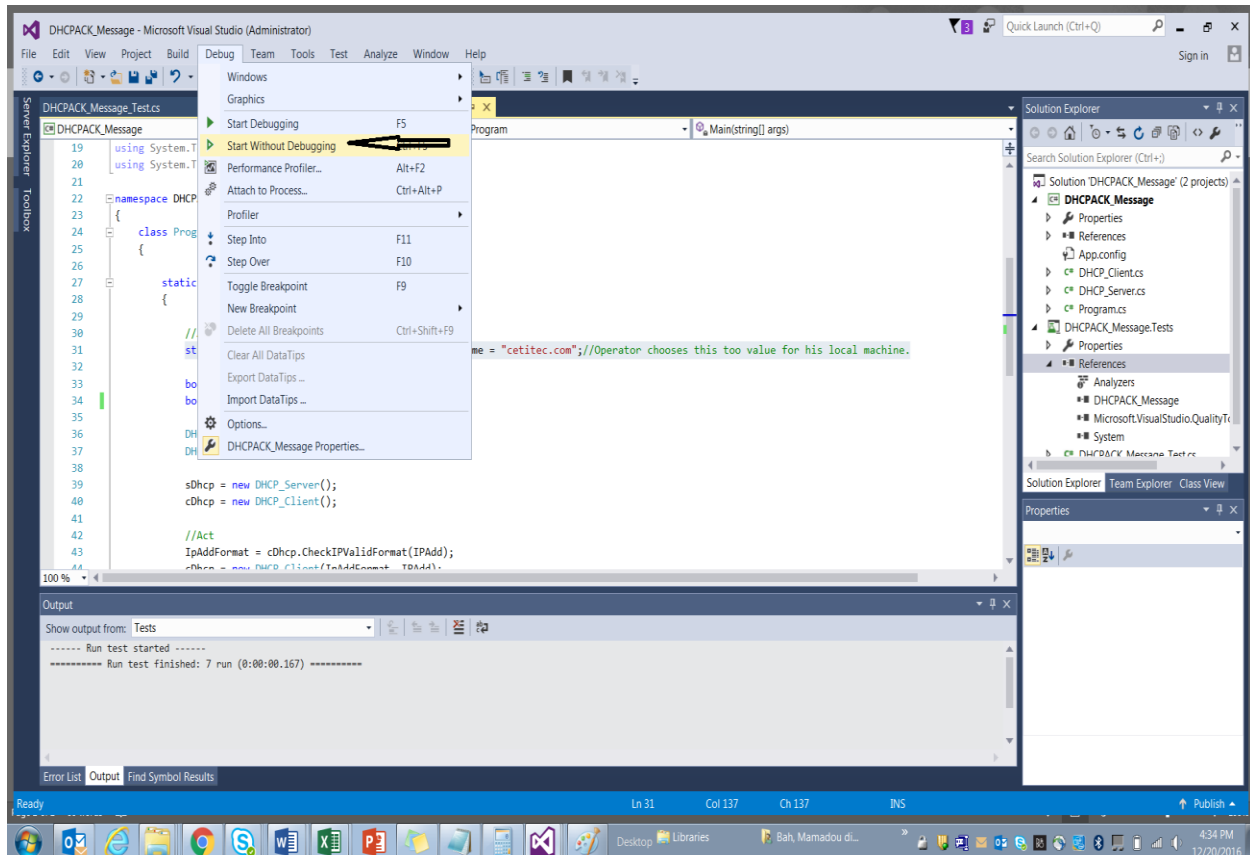
Choose the Ip Address value by respecting the following format for example: 192.168.1.2



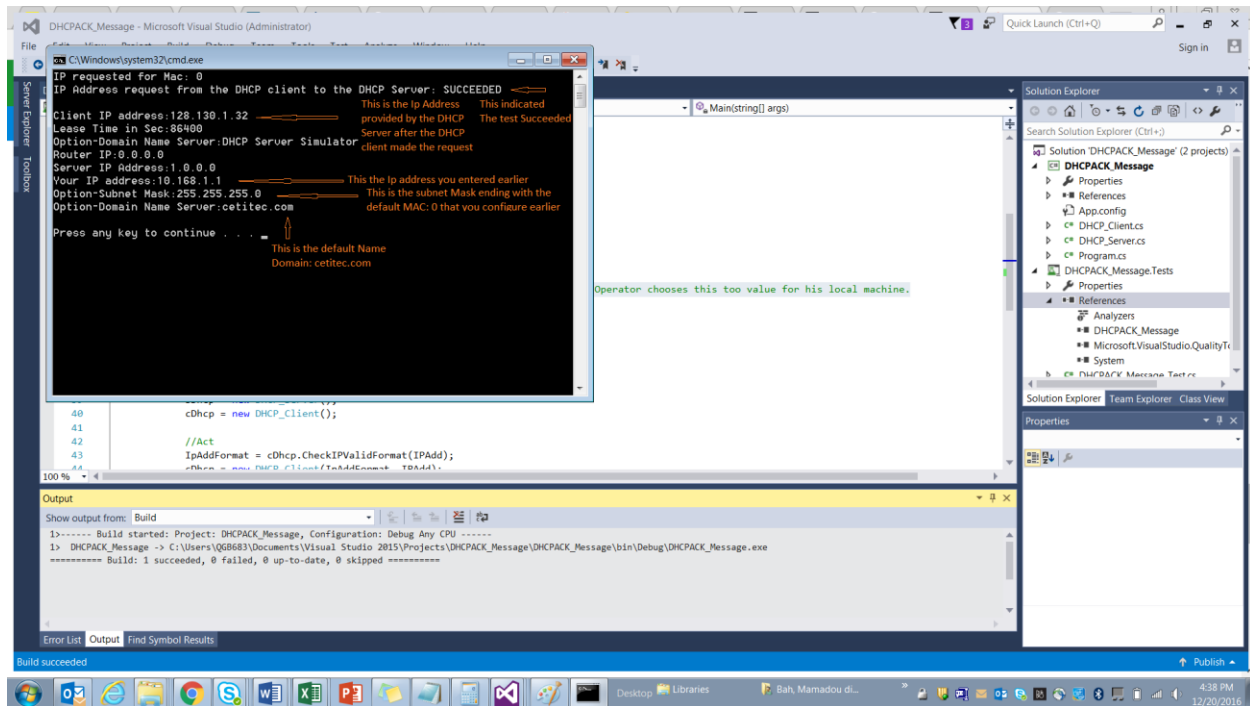
Step 2: Build the program by selecting the Build → Build Solution (as indicated into the below picture)



Step 3: Run the Program by selecting the Debug → Start without Debugging



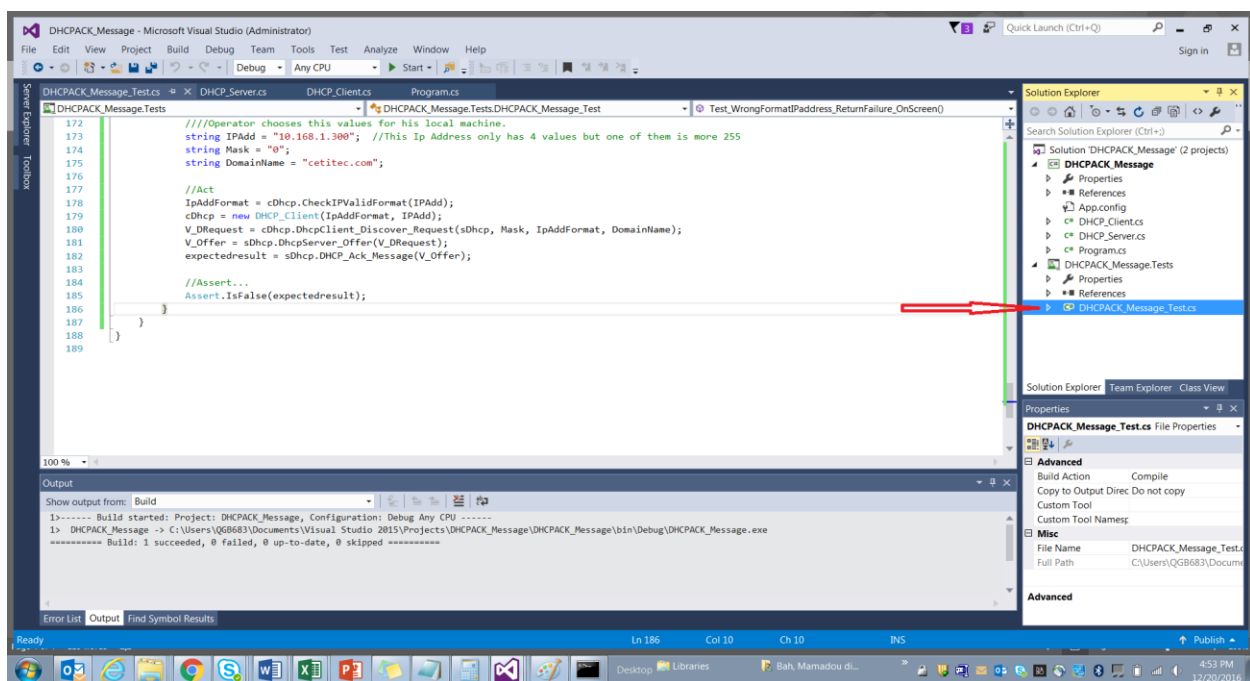
Step 4: You should see the result displayed on your application console as indicated below



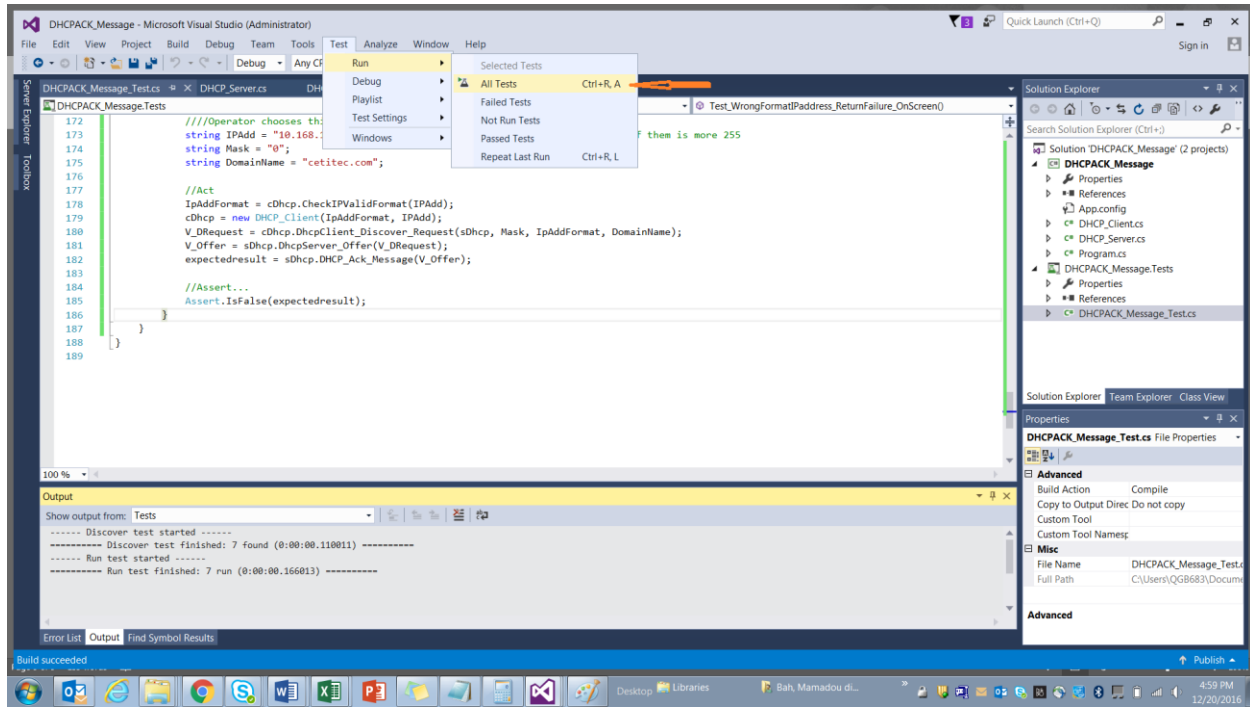
PS: Always Build the program first before running it in order to notice that it works as expected.

3. How to test the DHCPACK Message

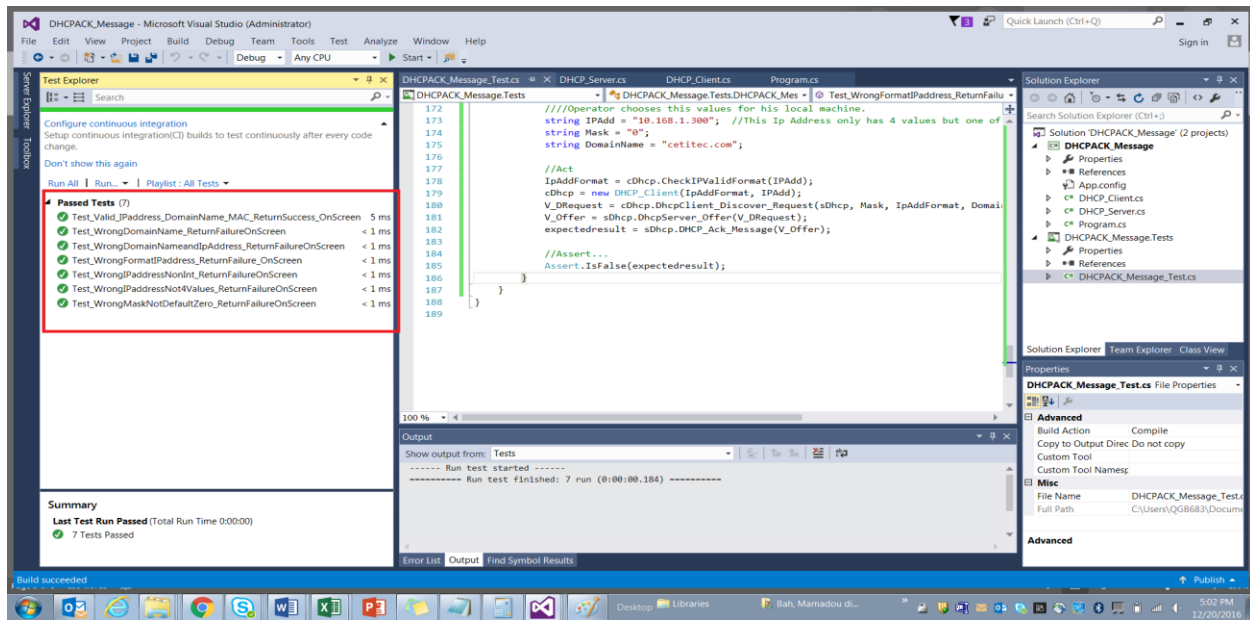
Step1: Double click on the DHCP_ACK_Message_Tests as indicated on the picture below:



Step 2: Select the Test Tab as indicated below (Test->Run->All Tests)



Step 3: You will get a screen like the below one.



You will see a test explorer displayed on your screen with 7 Passed test cases. Each of these test cases covers the Validation of the DHCP_Ack_Message program based on the input : IpAddress (Correct Format, 4 Values, each value is less than 255), the MAC (is the default value: 0), the Domain Name (is the default value: cetitec.com).