.NET Application Debugging Assessment

1. What is IIS process name?
   1. W3wp.exe
2. Remote debugger tool should be installed on which machine? The machine on which Visual Studio runs or the machine on which application to be tested runs?
   1. The Test Machine i.e, the machine on which application to be tested runs.
3. When we deploy web application in IIS it runs in which process?
   1. W3wp.exe (w3 worker process)
4. What way remote debugger helps Visual Studio connect to it?
   1. Remote debugger helps in creating a server on the machine in the format “TestMachineName:Port”. This server can be used by others to connect to this machine and debug the code remotely. This is used when the Visual Studio application is deployed on a different machine than the development machine.
5. How do we connect Visual Studio with remote debugger?
   1. There are different ways to connect VS to remote debugger based on application type.
      1. For web applications, we need to first host them on IIS. Remote debugging is done when IIS is running on a different machine. First, the development machine on which the application is hosted needs to have the remote debugger running. The server name is shown there. Then, from the Test Machine, we need to click ‘Attach a process’ under Debug menu. There, we can see all processes from all users. We must be connected to the remote machine. Here we search for “w3wp.exe” process. After we attach to this process, we can start debugging the code remotely.
      2. For non- web applications, we first need to install remote debugger on the test machine and start the tool. This gives us the name of the server in the test machine. Now, on the development machine side, we need to open properties of the project and under the debug tab we get the ‘Use remote machine’ option. There we enter the server name of the test machine. Now the code in the Visual Studio and the application in the Test Machine are connected. We need to make sure that the path of the application is exactly same in both the machines. After that, when we start the application in dev machine in debug mode, the application in the test machine starts too.
6. Which option in Visual Studio should we use to watch multiple threads running?
   1. We use ‘Show Threads in Source’ option at the debugger point to see the list of active threads. In our application, we used Parallel Stacks and Parallel watch as well. Other than this we can use Threads windows and debug location toolbar.