# Development Test

**Rules:**

1. You can use Visual Studio Express C#, 2008 or 2010
2. All code and referenced assemblies must be submitted in one zip file.  We need to be able to unzip and run the VS solution without changing settings, adding references or creating any databases.
3. The code must be submitted on or before the day and time agreed on.
4. You are free to create tests if you select to do so.  Submitted tests must pass when the reviewer runs them.  Use NUnit or Microsoft Tests.
5. You can do **any one or all** of the questions provided. All work should be completed over a 3 day period in total, irrespective of the number of questions completed.
6. Hint: We are looking at how you approach the problem and the patterns you use to solve them.

**Question 1:**

Write an MS-DOS emulator. Implement at least the basic functions:

* dir
* cd (chdir)
* del
* ren (rename)
* rd (rmdir)
* And any others that you are able to get to.

**Question 2:**

Write an application (console or WinForms) that will accept 1 to 8000 characters of text.  Then provide the following information about the text:

* Number of Characters and words
* Largest and smallest word
* Most frequently used word
* A list showing all the characters used in the text and the number of times they appear sorted in descending order.