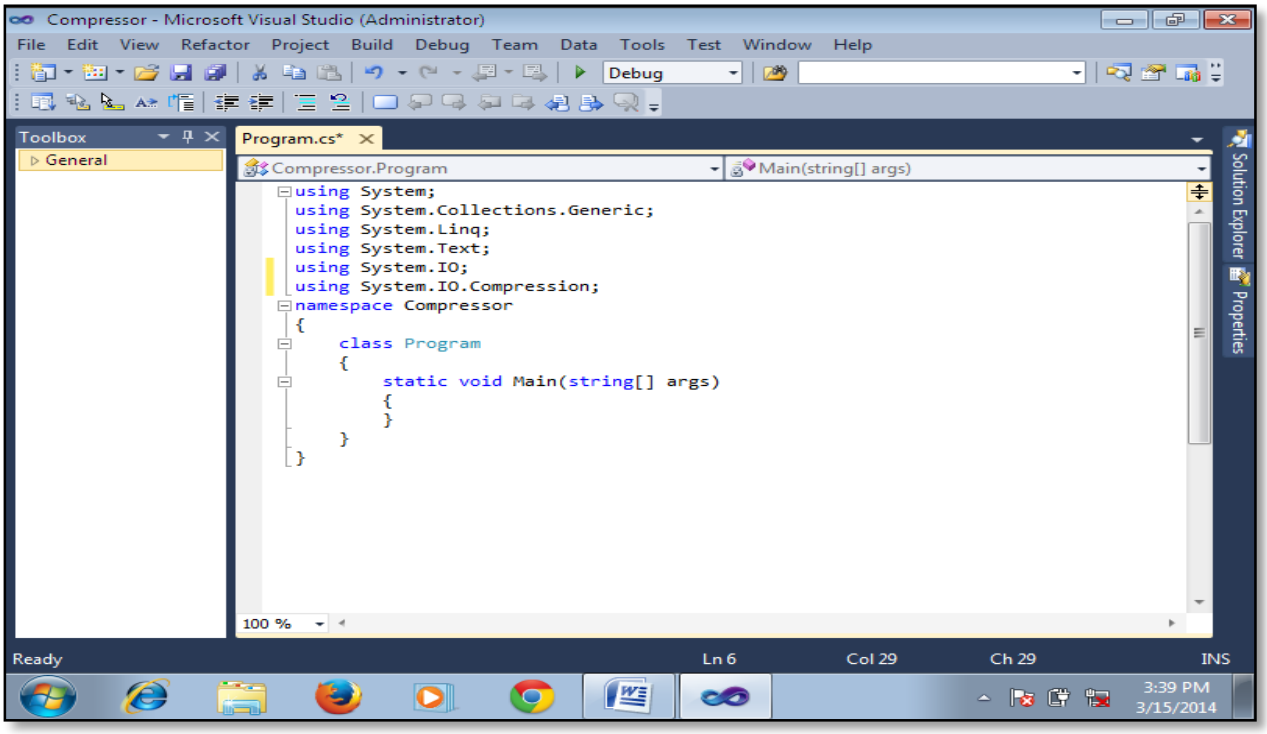
Reading and Writing Compressed Data in C#

Often when dealing with the files lot of space is used up on the hard disk. This is particularly true for graphics and sound files. You've probably come across the tool that enables you to compress and decompress files, which is handy when you want to move them around and e-mail them. In dot net **"System.IO.Compression"** namespace enables you to compress and decompress files from c# code. So in this article I'm going to shows you how to read and write compress data files using c#. Let's understand it practically.

Step 1: Create new console application called Compressor and save it in the directory.

Step 2: Add two namespaces **"System.IO"** and **"System.IO.Compresson"** at top of your code as shown below.



Step 3: Add following code into body of **Program.cs** file, just before **Main()** method.

```
class Program
{
    static void SaveCoompressedFile(string filename, string data)
    {
        FileStream file = new FileStream(filename, FileMode.Create, FileAccess.Write);
        GZipStream compressionstream = new GZipStream(file, CompressionMode.Compress);
        StreamWriter sw = new StreamWriter(compressionstream);
        sw.Write(data);
        sw.Close();

    }
    static void Main(string[] args)
    {
    }
```

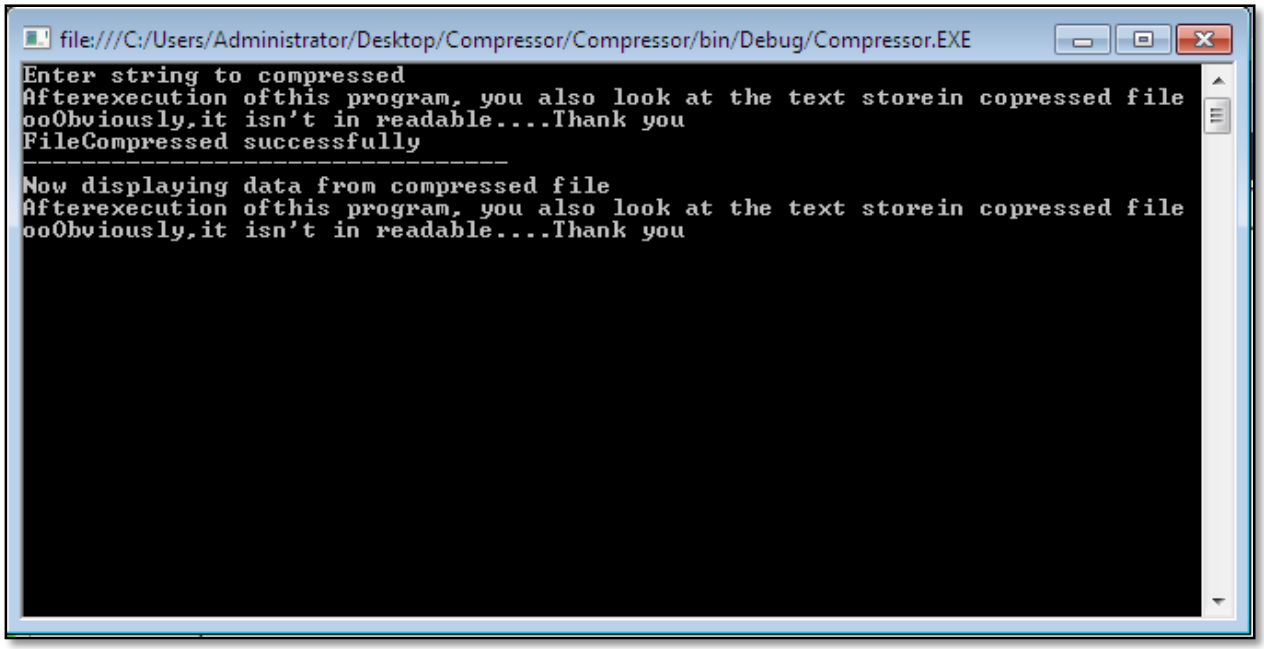
Step 4: Add another method for reading compress data below **SaveCompressedFile ()** method and above **Main ()** method.

```
static string LoadCompressedFile(string filename)
{
    FileStream file = new FileStream(filename, FileMode.Open, FileAccess.Read);
    GZipStream compressStream = new GZipStream(file, CompressionMode.Decompress);
    StreamReader sr = new StreamReader(compressStream);
    string data = sr.ReadToEnd();//read strem from current to end
    sr.Close();
    return data;
}
static void Main(string[] args)
{
}
```

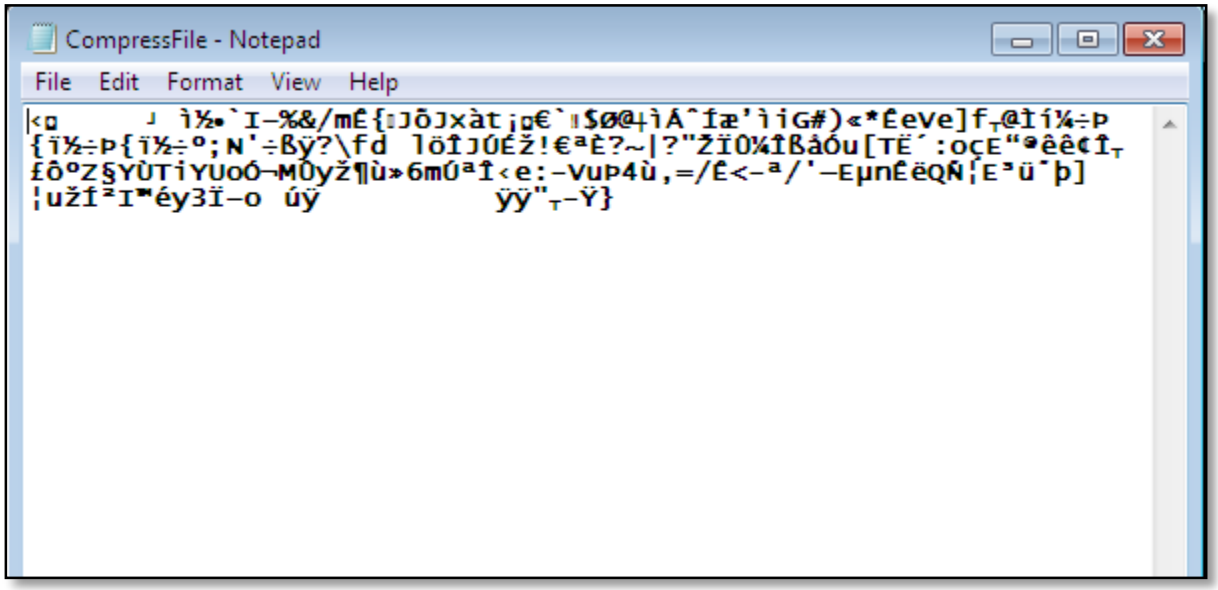
Step 5: Add the following code in your Main() method

```
try
{
    string filename = "CompressFile.txt";
    Console.WriteLine("Enter string to compressed");
    string source = Console.ReadLine();
    SaveCoompressedFile(filename, source);
    Console.WriteLine("FileCompressed successfully");
    Console.WriteLine("---------------------------------");
    Console.WriteLine("Now displaying data from compressed file");
    //displaing compressed data on console
   Console.WriteLine( LoadCompressedFile(filename));
}
catch (Exception ex)
{
    Console.WriteLine("Error while Compressing file" + ex.Message);
}
Console.ReadLine();
```

Step 6: Press f5 to run the application.



Step 7: Open compressed file.txt



Thank you…

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