Using a CTE to Split a String Into Rows with Line Numbers

Last year while working on my CTE presentation for a SQL Saturday I added a blog post called "Using a CTE to Split a String Into Rows", and since that posting I have used it many times. But as things go in development, eventually there is a need to do something more.

Doing some complex string building to create files lately I cam across the need to use a CTE to split strings into rows but to also include line numbers. To accomplish that I first started with the same function that I used last year, but renamed it, and added a second output column called LineNumber, here is what it looked like:

The things that have changed since the last post "Using a CTE to Split a String Into Rows", are the following:

- I added another column to the output called Line Number.
- Modified the input to be varchar(max).
- Adjusted the case statement to accommodate varchar(max).
- Cast the positions as bigint's in order to accomodate varchar(max).

So now when you run this on the original input, you get the following:

If you want to split up a comma delimited list, you could do it like this.

Just a small change, but if you need to have line numbers on the output, this will do it for you.