Programming in C

Write a program in C which can solve cryptarithmetic puzzles in the format of the sum of two words. For example, given the input

\[
\begin{array}{c}
\text{SEND} \\
+ \text{MORE} \\
\hline
\text{MONEY}
\end{array}
\]

the program would output

\[
\begin{array}{c}
9567 \\
+1085 \\
10652
\end{array}
\]

N.B. Each letter represents a different digit. [20 marks]