Solve ABCDE \* A = EEEEEE

1. Parse each number
   1. Use scanner to get number as int input
   2. Use a variable for each position (place10, place100, etc…)
      1. onesPlace: start by dividing input by %10
      2. For each successive number, divide input by 10 again, and then once more by %10
2. LOOP: verify if every number is unique
   1. If place100 is not equal to place10…
   2. If (place1000 is not equal to place100) \*AND\* (place1000 is not equal to place10…)
   3. Keep repeating until all variables are checked
   4. If there is a duplicate, re-prompt for input
      1. New variable nums\_Unique = FALSE
      2. While nums\_Unique is FALSE, keep re-prompting for number
      3. If numbers are unique, break loop by changing nums\_Unique to TRUE
3. Calculate result: multiply input by onesPlace (ABCDE \* A)
4. Evaluate result
   1. Create new variable: E + E\*10 + E\*100 + … + E\*