Idris Exercises: Part 1
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Questions

1. Take a look at the following selection of function specifications, given purely in the form of input and output types. For each of them, suggest possible operations that would satisfy the given input and output types. Note that there could be more than one answer in each case!

   (a) Input type: Vect n elem
       Output type: Vect n elem

   (b) Input type: Vect n elem
       Output type: Vect (n * 2) elem

   (c) Input type: Vect (1 + n) elem
       Output type: Vect n elem

   (d) Input types: Bounded n, Vect n elem
       Output type: elem
       (Assume that Bounded n represents a number between zero and n - 1)

2. Complete the missing definitions in intro1-list.idr, intro2-vect.idr and intro3-data.idr

3. Reimplement transpose_mat using zipWith instead of transpose_helper.

4. Implement addMatrix : Num a => Vect n (Vect m a) -> Vect n (Vect m a) -> Vect n (Vect m a)