Implementation of the FVDBLTT in Agda

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```
{-# OPTIONS --rewriting #-}

import Relation.Binary.PropositionalEquality as Eq
open Eq using (_≡_; trans; sym; cong; cong-app; subst) renaming (refl to ≡refl)
open Eq.≡-Reasoning using (begin_; _≡⟨⟩_; _■; step-≡)
open import Agda.Primitive
open import Agda.Builtin.Nat
open import Agda.Builtin.Sigma
open import Agda.Builtin.List

{-# BUILTIN REWRITE _≡_ #-}

module fvdbltt where
```

First of all, we define the index system for paths of profunctors.

```
data ℕ : Set where
    zero : ℕ
    suc : ℕ → ℕ

data two : Set where
    tt : two
    ff : two

_×_ : Set → Set → Set
A × B = Σ A (λ _ → B)
infixr 4 _×_

data one : Set where
     : one


_ _ : Set → Set → Set
A  B = Σ two (λ i → K i) where
    K : two → Set
    K tt = A
    K ff = B
infixr 4 _ _

data  : Set where


Fin : ℕ → Set
Fin zero =
Fin (suc n) = one  Fin n
```