```haskell
module Eval2 (eval) where

import AST

-- Estados
type Env = [(Variable,Int)]

-- Estado nulo
initState :: Env
initState = []

-- Mónada estado
newtype StateError a = StateError { runStateError :: Env -> Maybe (a, Env) }

-- Clase para representar mónadas con estado de variables
class Monad m => MonadState m where
    -- Busca el valor de una variable
    lookfor :: Variable -> m Int
    -- Cambia el valor de una variable
    update :: Variable -> Int -> m ()

-- Clase para representar mónadas que lanzan errores
class Monad m => MonadError m where
    -- Lanza un error
    throw :: m a

-- ejercicio 2.a
-- Instancia de Monad para StateError
instance Monad StateError where
      return x = StateError (\s -> Just (x,s))
      m >>= f  = StateError (\s -> case runStateError m s of
                                     Nothing -> Nothing
                                     Just (v, s') -> runStateError (f v) s')

-- ejercicio 2.b
-- Instancia de MonadErrr para StateError
instance MonadError StateError where
      throw = StateError (\s -> Nothing)

-- ejercicio 2.c
-- Instancia de MonadState para StateError
instance MonadState StateError where
      lookfor v = StateError (\s -> Just (lookfor' v s, s))
                  where lookfor' v ((u, j):ss) | v == u = j
                                               | v /= u = lookfor' v ss
      update v i = StateError (\s -> Just ((), update' v i s))
                   where update' v i [] = [(v, i)]
                         update' v i ((u, _):ss) | v == u = (v, i):ss
                         update' v i ((u, j):ss) | v /= u = (u, j):(update' v i ss)

-- Evalua un programa en el estado nulo
eval :: Comm -> Maybe ((),Env)
eval c = runStateError (evalComm c) initState

-- Evalua un comando en un estado dado
evalComm :: (MonadState m, MonadError m) => Comm -> m ()
evalComm Skip           = return ()
evalComm (Let v i)      = do ei <- evalIntExp i
                             update v ei
evalComm (Seq c1 c2)    = do evalComm c1
                             evalComm c2
evalComm (Cond b c1 c2) = do eb <- evalBoolExp b
                             if eb then evalComm c1
                                   else evalComm c2
evalComm (While b c)    = do eb <- evalBoolExp b
                             if eb then evalComm (Seq c (While b c))
                                   else evalComm Skip


-- Evalua una expresion entera, sin efectos laterales
evalIntExp :: (MonadState m, MonadError m) => IntExp -> m Int
evalIntExp (Const i)   = return i
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```
evalIntExp (Var v)     = lookfor v
evalIntExp (UMinus i)  = do u <- evalIntExp i
                            return (-u)
evalIntExp (Plus n m)  = do arg1 <- evalIntExp n
                            arg2 <- evalIntExp m
                            return (arg1 + arg2)
evalIntExp (Minus n m) = do arg1 <- evalIntExp n
                            arg2 <- evalIntExp m
                            return (arg1 - arg2)
evalIntExp (Times n m) = do arg1 <- evalIntExp n
                            arg2 <- evalIntExp m
                            return (arg1 * arg2)
evalIntExp (Div n m)   = do arg1 <- evalIntExp n
                            arg2 <- evalIntExp m
                            if arg2 == 0 then throw else return (arg1 `div` arg2)

-- Evalua una expresion entera, sin efectos laterales
evalBoolExp :: (MonadState m, MonadError m) => BoolExp -> m Bool
evalBoolExp BTrue     = return True
evalBoolExp BFalse    = return False
evalBoolExp (Eq n m)  = do arg1 <- evalIntExp n
                           arg2 <- evalIntExp m
                           return (arg1 == arg2)
evalBoolExp (Lt n m)  = do arg1 <- evalIntExp n
                           arg2 <- evalIntExp m
                           return (arg1 < arg2)
evalBoolExp (Gt n m)  = do arg1 <- evalIntExp n
                           arg2 <- evalIntExp m
                           return (arg1 > arg2)
evalBoolExp (And p q) = do arg1 <- evalBoolExp p
                           arg2 <- evalBoolExp q
                           return (arg1 && arg2)
evalBoolExp (Or p q)  = do arg1 <- evalBoolExp p
                           arg2 <- evalBoolExp q
                           return (arg1 || arg2)
evalBoolExp (Not p)   = do ep <- evalBoolExp p
                           return (not ep)
```