

## Example: Banking System

### WithdrawMoney

$\Delta$ BankAccount

dollarAmount? :  $\mathbb{N}$

centAmount? :  $\mathbb{N}$

dollarAmount?  $\leq$  dollars

dollarAmount? = dollars  $\Rightarrow$  centAmount?  $\leq$  cents

centAmount?  $>$  cents

$\Rightarrow$  ( dollars' = dollars - dollarAmount? - 1  
     $\wedge$  cents' = cents - centAmount? + 100 )

centAmount?  $\leq$  cents

$\Rightarrow$  ( dollars' = dollars - dollarAmount?  
     $\wedge$  cents' = cents - centAmount? )