

CreditCard

$\uparrow(\textit{limit}, \textit{balance}, \textit{INIT}, \textit{withdraw}, \textit{deposit}, \textit{withdrawAvail})$

$\textit{limit} : \mathbb{N}$

$\textit{limit} \in 1000, 2000, 5000$

$\textit{balance} : \mathbb{Z}$

$\textit{balance} + \textit{limit} \geq 0$

INIT

$\textit{balance} = 0$

withdraw

$\Delta(\textit{balance})$

$\textit{amount?} : \mathbb{N}$

$\textit{amount?} \leq \textit{balance} + \textit{limit}$

$\textit{balance}' = \textit{balance} - \textit{amount?}$

deposit

$\Delta(\textit{balance})$

$\textit{amount?} : \mathbb{N}$

$\textit{balance}' = \textit{balance} + \textit{amount?}$

withdrawAvail

$\Delta(\textit{balance})$

$\textit{amount!} : \mathbb{N}$

$\textit{amount!} = \textit{balance} + \textit{limit}$

$\textit{balance}' = -\textit{limit}$