---------------------------- MODULE *Test* ----------------------------

INSTANCE *Naturals*

INSTANCE *Sequences*

LOCAL INSTANCE *IOUtils*

LOCAL INSTANCE *Json*

CONSTANT *File*

CONSTANT *CurrState*

CONSTANT *SuccState*

$FormatOpts \triangleq$
   $[format \quad\quad \mapsto \text{"TXT"},$
    $charset \quad\quad \mapsto \text{"UTF-8"},$
    $openOptions \mapsto \langle \text{"WRITE"}, \text{"CREATE"}, \text{"APPEND"} \rangle]$

$Delete \triangleq$
   $\wedge\ IOExec(\langle \text{"rm"}, \text{"-f"}, File \rangle).exitValue = 0$

$Log(context) \triangleq$
   LET
      $currState \triangleq [k \in \{k \in \text{DOMAIN } CurrState : \text{DOMAIN } CurrState[k] \neq \{\}\} \mapsto CurrState[k]]$
      $succState \triangleq [k \in \{k \in \text{DOMAIN } SuccState : \text{DOMAIN } SuccState[k] \neq \{\}\} \mapsto SuccState[k]]$
        $record \triangleq [context \quad \mapsto context,$
                 $currState \mapsto currState,$
                 $succState \mapsto [k \in \{k \in \text{DOMAIN } succState : k \in \text{DOMAIN } currState \Rightarrow$
                                 $currState[k] \neq succState[k]\} \mapsto succState[k]]]$
   IN $Serialize(ToJsonObject(record) \circ \text{"\textbackslash n"}, File, FormatOpts).exitValue = 0$

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