w-pred[11,40]

w-pred(w;e)
$\equiv_{\text{def}}$ if(time(e) $=_0$ 0)
  then inr ·
 ifisnull(a(loc(e);time(e) - 1))
  then w-pred(w;<loc(e), time(e) - 1>)
 else inl <loc(e), time(e) - 1>
 fi

clarification:

w-pred(w;e)
$\equiv_{\text{def}}$ if(w-time(w; e) $=_0$ 0)
  then inr ·
 ifw-isnull(w; w-a(w; w-loc(w; e); (w-time(w; e) - 1)))
  then w-pred(w;<w-loc(w; e), w-time(w; e) - 1>)
 else inl <w-loc(w; e), w-time(w; e) - 1>
 fi
(recursive)