Write a program to print the sequence of natural numbers, one per time unit.

After trying the question, scroll down to the solution.
Either we define $P$ and $Q$ by

$$P = \forall n: \text{nat} \cdot M_{w+n} = n \land T_{w+n} = t + n$$
$$Q = \forall n: \text{nat} \cdot M_{w+n} = n + m \land T_{w+n} = t + n$$

and refine them by

$$P \iff m := 0. \ Q$$
$$Q \iff c! m. \ m := m + 1. \ t := t + 1. \ Q$$

or we define $P$ and $Q$ by equations similar to the above implications.