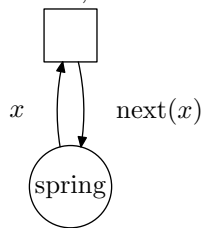


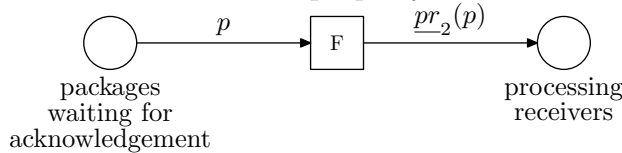
8.1 The system can be represented by one predicate and one event. The conditions “summer”, “spring”, “autumn” and “winter” are combined into a predicate “season”, with possible values *summer*, *autumn*, *winter*, *spring*. We mark the predicate initially with *spring* according to the case in the C/E-net. Additionally, we define a function *next*(*x*):

$$\begin{aligned} \text{next}(\text{spring}) &= \text{summer} \\ \text{next}(\text{summer}) &= \text{autumn} \\ \text{next}(\text{autumn}) &= \text{winter} \\ \text{next}(\text{winter}) &= \text{spring} \end{aligned}$$

Then, the following P/E-net represents the four seasons system.



8.2 a) The property can be expressed as an implication “Predicate *package waiting for acknowledgement* contains a token ( $d_i, d_j$ )” → “Predicate *processing receivers* contains a token  $d_j$ ”. The definition 8.4(b)(iii) provides a direct transformation of the property formula to a fact. The resulting fact is:



b) We can proceed similarly as in a). The property can be formulated as an implication, and transformed to a fact by definition 8.4(b)(iii). The resulting fact is:

