```
KnotAssociation@n gives an association that returns the list of all valid
   knots with n crossings whose alternating form is equal to the given knot.
KnotAssociation@n Integer := KnotAssociation@n =
    Table [k \rightarrow Select[ValidKnots@n, Abs/@# == k \&],
```

{k, CandidateKnots@n}] // Association;