```
ReidemeisterOne@k gives all the knots that can be obtained by adding
   a positive kink at an even index to the knot k, which is given in modified DT form.
ReidemeisterOne@k MDT := ReidemeisterOne@k =
   Table EDT @@ ( Map[# + If[Abs@# \ge 2i, 2 Sign@#, 0] &,
```

// Convert, {i, Length@k}] ∪ {} // KnotSort;

List@@Build@k^T, {2}]

 $\bigcup \{\{2i, 2i+1\}\}\}^{\top}$