```
KnotGraph@k gives the modified 3-valent graph with a 4 vertices in a diamond
    at each crossing of the knot k, which is given in modified DT form.

KnotGraph@k_MDT := KnotGraph@k = (Join@@ Table[
```

 $Array[\{v, \# -1\} \leftrightarrow \{v, Mod[\#, 4]\} \&, 4]]$

 $\{v, 2\} \mapsto \{Ordering[List@@Abs/@k][Mod[v-1, Length@k, 1]], 3\}\},$

{v, Length@k}] // Graph);

 $\{\{v, 0\} \leftrightarrow \{Ordering[List@@Abs/@k][v], 1\},$