CandidateKnots@*n* gives the sorted list of all irreducible planar minimal alternating knot diagrams with *n* crossings.

```
CandidateKnots@n_Integer := CandidateKnots@n =
  If[n == 0, {MDT[]}, Block[{k, l, p, y = {}},
    For[p = 0, p < n!, p++, k = {};
     Do[Complement[Range@n, k]
         [[⌊Mod[p, (n - i + 1)!] / (n - i)!⌋ + 1]]
        // AppendTo[k, #] &;
      If[2 k[[1]] - 1 > (Abs[2 i - 1 - 2 k[[i]]]
          // Min[#, 2 n - #] &), p += (n - i)! - 1;
       Goto@l];
      If[k[[-1]] ≤ i, Do[k[[j ;;]] ⋃ {}
         // If[# == Range[j, i] || # == Range[j, i] - 1,
           p += (n - i)! - 1;
           Goto@l] &,
        {j, If[i == n && n > 1, 2, 1], i}]], {i, n}];
     MDT @@ k //
      If[PlanarGraphQ@KnotGraph@# &&
          # === Minimal@#, AppendTo[y, #]] &;
     Label@l];
    y]];
```