```
Poly[n_] := \{Cos[#], Sin[#]\} \& /@Range[0, 2\pi, \frac{2\pi}{}]
Loop[ptL_List] :=
 If[Length[ptL] > 1, {Thickness[0.02], Hue[2], Line[Append[ptL, First[ptL]]]}},
   {Thickness[0.02], Hue[2], Circle[First[ptL], .1]}]
BellRule1[n_] = {S_{_}} \rightarrow {S, {n}};
BellRule2[n] = \{b_{-}, \{S_{-}\}, a_{-}\} \rightarrow \{b, \{S, n\}, a\};
BellLists[1] = {{{1}}};
BellLists[n_Integer?Positive] :=
 Flatten[Map[ReplaceList[#, {BellRule1[n], BellRule2[n]}] &, BellLists[n-1]], 1]
BellDiagram[L_List] :=
 Module[{thisPoly = Poly[Max[L]], frm}, frm = {Hue[1, 1, 0], Line[2 thisPoly]};
  \label{eq:Graphics} $$\operatorname{Graphics}[\{frm, Map[Loop, Map[thisPoly[#]] \&, L]]\}, ImageSize \to \{30, 30\}]]$$
BellDiagram[i_, n_] := BellDiagram[BellLists[n][[i]]]
(* Just to clear the variables only use if you need to *)
(* recompilethe above group *)
ClearAll["Global`*"]
funcStirlingiii[list_] := (
  Table[BellDiagram[Part[list, i]], {i, 1, Length[list]}]
list3k3d = \{\{\{1\}, \{2\}, \{3\}\}, \{\{1\}, \{2\}, \{3\}, \{4\}\},
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