In[25]:=
```
Panel[Style[Manipulate[Module[{Orb, m = Max[{xmax, ymax}], LV},
    Iterate[f_, x_, n_] := Nest[Evaluate[f[#] &], x, n];
    Orbit[f_, x_, n_, nskip_: 0] := If[n > 0,
        NestList[Evaluate[f[#] &], Iterate[f, x, nskip], n],
        {Iterate[f, x, nskip]}];
    LV[{x_, y_}] := {x Exp[r - r x - s y], x Exp[r - s x - r y]};
    Orb = Orbit[LV, {p[[1]], p[[2]]}, n];
    Column[{ListPlot[Orb, AxesLabel → {"x", "y"}, PlotRange → {{0, xmax},
        {0, ymax}}, ImageSize → {300}, PlotLabel → "Orbity"], ListPlot[
      Table[Orb[[i, 1]], {i, 1, n}], PlotRange → {{0, n}, {0, m}}, AxesLabel →
       {"n", "x"}, ImageSize → {300}], ListPlot[Table[Orb[[i, 2]], {i, 1, n}],
      PlotRange → {{0, n}, {0, m}}, AxesLabel → {"n", "y"}, ImageSize → {300}]}]],
  Style["Lotka-Volterra\n\n x_{n+1}=x_n e^{r-r x_n-s y_n}\n y_{n+1}=y_n e^{r-r y_n-s x_n}\n\n", 18, Bold],
  {{r, 2.257, "r"}, 0.01, 4.0}, {{s, 2.01, "s"}, 0.01, 4},
  {{p, {1.0, 1.0}}, Locator}, {{n, 200}, 1, 2000, 1}, {{xmax, 2.5}, 0.1, 5},
  {{ymax, 2.5}, 0.1, 5}, ControlPlacement → Left], DefaultOptions →
  {Panel → {Background → LightGray}}], FrameMargins → {{-3, -2}, {-2, -3}}]
```

Out[25]=

Lotka–Volterra

$$x_{n+1}=x_n\, e^{r-r\,x_n-s\,y_n}$$

$$y_{n+1}=y_n\, e^{r-r\,y_n-s\,x_n}$$

r

s

n

xmax

ymax