```
ln[594] = edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
           5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
       path = {0};
       edgesToHighlight = Partition[path, 2, 1];
       edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
       erf[pts_, edge_, ___] :=
          If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
           {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
       GraphPlot[edges, PlotLabel → "path from 0 to 0", DirectedEdges → True,
        VertexLabeling → True, Frame → True,
        EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
       edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
           5 \rightarrow 1, \ 0 \rightarrow 4, \ 0 \rightarrow 2, \ 7 \rightarrow 3, \ 1 \rightarrow 3, \ 2 \rightarrow 7, \ 6 \rightarrow 2, \ 3 \rightarrow 6, \ 6 \rightarrow 0, \ 6 \rightarrow 4;
       path = {0, 4, 5, 1};
       edgesToHighlight = Partition[path, 2, 1];
       edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
       erf[pts_, edge_, ___] :=
          If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
           {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
       GraphPlot[edges, PlotLabel → "path from 0 to 1", DirectedEdges → True,
        VertexLabeling → True, Frame → True,
        EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
       edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
           5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4};
       path = \{0, 2\};
       edgesToHighlight = Partition[path, 2, 1];
       edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
       erf[pts_, edge_, ___] :=
          If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
           {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
       GraphPlot[edges, PlotLabel → "path from 0 to 2", DirectedEdges → True,
        VertexLabeling → True, Frame → True,
        EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
       edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
           5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
       path = \{0, 2, 7, 3\};
       edgesToHighlight = Partition[path, 2, 1];
       edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
       erf[pts_, edge_, ___] :=
          If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
           {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
       GraphPlot[edges, PlotLabel \rightarrow "path from 0 to 3", DirectedEdges \rightarrow True,
        VertexLabeling → True, Frame → True,
        EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
       edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
           5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4};
       path = \{0, 4\};
       edgesToHighlight = Partition[path, 2, 1];
```

```
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 0 to 4", DirectedEdges → True,
 \texttt{VertexLabeling} \rightarrow \texttt{True}, \, \texttt{Frame} \rightarrow \texttt{True}, \,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{0, 4, 5\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 0 to 5", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{0, 2, 7, 3, 6\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 0 to 6", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4;
path = \{0, 2, 7\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 0 to 7", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4;
path = \{1, 3, 6, 0\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
```

```
GraphPlot[edges, PlotLabel → "path from 1 to 0", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = {1};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 1 to 1", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 {\tt EdgeRenderingFunction} \rightarrow {\tt erf} \text{, Method} \rightarrow {\tt "SpringEmbedding"}]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4;
path = \{1, 3, 6, 2\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 1 to 2", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 {\tt EdgeRenderingFunction} \rightarrow {\tt erf} \text{, Method} \rightarrow {\tt "SpringEmbedding"}]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{1, 3\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 1 to 3", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction \rightarrow erf, Method \rightarrow "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{1, 3, 6, 4\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 1 to 4", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
```

```
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, \ 0 \rightarrow 4, \ 0 \rightarrow 2, \ 7 \rightarrow 3, \ 1 \rightarrow 3, \ 2 \rightarrow 7, \ 6 \rightarrow 2, \ 3 \rightarrow 6, \ 6 \rightarrow 0, \ 6 \rightarrow 4;
path = \{1, 3, 6, 2, 7, 5\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 1 to 5", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = {1, 3, 6};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
\label{localization} {\tt GraphPlot[edges, PlotLabel $\rightarrow$ "path from 1 to 6", DirectedEdges $\rightarrow$ True,}
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, \ 0 \rightarrow 4, \ 0 \rightarrow 2, \ 7 \rightarrow 3, \ 1 \rightarrow 3, \ 2 \rightarrow 7, \ 6 \rightarrow 2, \ 3 \rightarrow 6, \ 6 \rightarrow 0, \ 6 \rightarrow 4;
path = \{1, 3, 6, 2, 7\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 1 to 7", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, \ 0 \rightarrow 4, \ 0 \rightarrow 2, \ 7 \rightarrow 3, \ 1 \rightarrow 3, \ 2 \rightarrow 7, \ 6 \rightarrow 2, \ 3 \rightarrow 6, \ 6 \rightarrow 0, \ 6 \rightarrow 4;
path = \{2, 7, 3, 6, 0\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 2 to 0", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4};
path = \{2, 7, 5, 1\};
edgesToHighlight = Partition[path, 2, 1];
```

```
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 2 to 1", DirectedEdges → True,
 \texttt{VertexLabeling} \rightarrow \texttt{True}, \, \texttt{Frame} \rightarrow \texttt{True}, \,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = {2};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 2 to 2", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{2, 7, 3\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 2 to 3", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4;
path = \{2, 7, 5, 4\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 2 to 4", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4;
path = \{2, 7, 5\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
```

```
GraphPlot[edges, PlotLabel → "path from 2 to 5", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{2, 7, 3, 6\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 2 to 6", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 {\tt EdgeRenderingFunction} \rightarrow {\tt erf} \text{, Method} \rightarrow {\tt "SpringEmbedding"}]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4;
path = \{2, 7\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 2 to 7", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 {\tt EdgeRenderingFunction} \rightarrow {\tt erf} \text{, Method} \rightarrow {\tt "SpringEmbedding"}]
edges = \{4 \to 5, 5 \to 4, 4 \to 7, 5 \to 7, 7 \to 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = {3, 6, 0};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 3 to 0", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction \rightarrow erf, Method \rightarrow "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{3, 6, 2, 7, 5, 1\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 3 to 1", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
```

```
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, \ 0 \rightarrow 4, \ 0 \rightarrow 2, \ 7 \rightarrow 3, \ 1 \rightarrow 3, \ 2 \rightarrow 7, \ 6 \rightarrow 2, \ 3 \rightarrow 6, \ 6 \rightarrow 0, \ 6 \rightarrow 4;
path = \{3, 6, 2\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 3 to 2", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4;
path = {3};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
\label{localization} {\tt GraphPlot[edges, PlotLabel $\rightarrow$ "path from 3 to 3", DirectedEdges $\rightarrow$ True,}
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, \ 0 \rightarrow 4, \ 0 \rightarrow 2, \ 7 \rightarrow 3, \ 1 \rightarrow 3, \ 2 \rightarrow 7, \ 6 \rightarrow 2, \ 3 \rightarrow 6, \ 6 \rightarrow 0, \ 6 \rightarrow 4;
path = \{3, 6, 4\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 3 to 4", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, \ 0 \rightarrow 4, \ 0 \rightarrow 2, \ 7 \rightarrow 3, \ 1 \rightarrow 3, \ 2 \rightarrow 7, \ 6 \rightarrow 2, \ 3 \rightarrow 6, \ 6 \rightarrow 0, \ 6 \rightarrow 4;
path = \{3, 6, 2, 7, 5\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 3 to 5", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4};
path = {3, 6};
edgesToHighlight = Partition[path, 2, 1];
```

```
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 3 to 6", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{3, 6, 2, 7\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 3 to 7", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{4, 7, 3, 6, 0\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 4 to 0", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4;
path = \{4, 5, 1\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 4 to 1", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4;
path = \{4, 7, 3, 6, 2\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
```

```
GraphPlot[edges, PlotLabel → "path from 4 to 2", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = {4, 7, 3};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 4 to 3", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 {\tt EdgeRenderingFunction} \rightarrow {\tt erf} \text{, Method} \rightarrow {\tt "SpringEmbedding"}]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4;
path = {4};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 4 to 4", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 {\tt EdgeRenderingFunction} \rightarrow {\tt erf} \text{, Method} \rightarrow {\tt "SpringEmbedding"}]
edges = \{4 \to 5, 5 \to 4, 4 \to 7, 5 \to 7, 7 \to 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{4, 5\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 4 to 5", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction \rightarrow erf, Method \rightarrow "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{4, 7, 3, 6\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 4 to 6", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
```

```
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, \ 0 \rightarrow 4, \ 0 \rightarrow 2, \ 7 \rightarrow 3, \ 1 \rightarrow 3, \ 2 \rightarrow 7, \ 6 \rightarrow 2, \ 3 \rightarrow 6, \ 6 \rightarrow 0, \ 6 \rightarrow 4;
path = \{4, 7\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 4 to 7", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = {5, 1, 3, 6, 0};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
\label{localization} {\tt GraphPlot[edges, PlotLabel $\rightarrow$ "path from 5 to 0", DirectedEdges $\rightarrow$ True,}
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, \ 0 \rightarrow 4, \ 0 \rightarrow 2, \ 7 \rightarrow 3, \ 1 \rightarrow 3, \ 2 \rightarrow 7, \ 6 \rightarrow 2, \ 3 \rightarrow 6, \ 6 \rightarrow 0, \ 6 \rightarrow 4;
path = \{5, 1\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 5 to 1", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, \ 0 \rightarrow 4, \ 0 \rightarrow 2, \ 7 \rightarrow 3, \ 1 \rightarrow 3, \ 2 \rightarrow 7, \ 6 \rightarrow 2, \ 3 \rightarrow 6, \ 6 \rightarrow 0, \ 6 \rightarrow 4;
path = \{5, 1, 3, 6, 2\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 5 to 2", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4};
path = {5, 1, 3};
edgesToHighlight = Partition[path, 2, 1];
```

```
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 5 to 3", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{5, 4\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 5 to 4", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = {5};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 5 to 5", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4;
path = \{5, 1, 3, 6\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 5 to 6", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4;
path = \{5, 7\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
```

```
GraphPlot[edges, PlotLabel → "path from 5 to 7", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = {6, 0};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 6 to 0", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{6, 2, 7, 5, 1\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 6 to 1", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 {\tt EdgeRenderingFunction} \rightarrow {\tt erf} \text{, Method} \rightarrow {\tt "SpringEmbedding"}]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{6, 2\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 6 to 2", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction \rightarrow erf, Method \rightarrow "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{6, 2, 7, 3\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
\label{eq:continuous} {\tt GraphPlot[edges, PlotLabel $\rightarrow$ "path from 6 to 3", DirectedEdges $\rightarrow$ True,}
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
```

```
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, \ 0 \rightarrow 4, \ 0 \rightarrow 2, \ 7 \rightarrow 3, \ 1 \rightarrow 3, \ 2 \rightarrow 7, \ 6 \rightarrow 2, \ 3 \rightarrow 6, \ 6 \rightarrow 0, \ 6 \rightarrow 4;
path = \{6, 4\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 6 to 4", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4;
path = \{6, 2, 7, 5\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
\label{localization} {\tt GraphPlot[edges, PlotLabel $\rightarrow$ "path from 6 to 5", DirectedEdges $\rightarrow$ True,}
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, \ 0 \rightarrow 4, \ 0 \rightarrow 2, \ 7 \rightarrow 3, \ 1 \rightarrow 3, \ 2 \rightarrow 7, \ 6 \rightarrow 2, \ 3 \rightarrow 6, \ 6 \rightarrow 0, \ 6 \rightarrow 4;
path = {6};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 6 to 6", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, \ 0 \rightarrow 4, \ 0 \rightarrow 2, \ 7 \rightarrow 3, \ 1 \rightarrow 3, \ 2 \rightarrow 7, \ 6 \rightarrow 2, \ 3 \rightarrow 6, \ 6 \rightarrow 0, \ 6 \rightarrow 4;
path = \{6, 2, 7\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 6 to 7", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4};
path = \{7, 3, 6, 0\};
edgesToHighlight = Partition[path, 2, 1];
```

```
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 7 to 0", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{7, 5, 1\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 7 to 1", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = \{7, 3, 6, 2\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 7 to 2", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4;
path = \{7, 3\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel → "path from 7 to 3", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4;
path = \{7, 5, 4\};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
```

```
GraphPlot[edges, PlotLabel → "path from 7 to 4", DirectedEdges → True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \to 1, 0 \to 4, 0 \to 2, 7 \to 3, 1 \to 3, 2 \to 7, 6 \to 2, 3 \to 6, 6 \to 0, 6 \to 4};
path = {7, 5};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 7 to 5", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction → erf, Method → "SpringEmbedding"]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = {7, 3, 6};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
    {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 7 to 6", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 {\tt EdgeRenderingFunction} \rightarrow {\tt erf} \text{, Method} \rightarrow {\tt "SpringEmbedding"}]
edges = \{4 \rightarrow 5, 5 \rightarrow 4, 4 \rightarrow 7, 5 \rightarrow 7, 7 \rightarrow 5,
    5 \rightarrow 1, 0 \rightarrow 4, 0 \rightarrow 2, 7 \rightarrow 3, 1 \rightarrow 3, 2 \rightarrow 7, 6 \rightarrow 2, 3 \rightarrow 6, 6 \rightarrow 0, 6 \rightarrow 4};
path = {7};
edgesToHighlight = Partition[path, 2, 1];
edgesToHighlight = Join[edgesToHighlight, Reverse /@ edgesToHighlight];
erf[pts_, edge_, ___] :=
   If[MemberQ[edgesToHighlight, edge], {Thick, Black, {Arrowheads[Large], Arrow[pts, 0.1]}},
     {Darker[Red], {Arrowheads[Medium], Arrow[pts, 0.1]}}];
GraphPlot[edges, PlotLabel \rightarrow "path from 7 to 7", DirectedEdges \rightarrow True,
 VertexLabeling → True, Frame → True,
 EdgeRenderingFunction \rightarrow erf, Method \rightarrow "SpringEmbedding"]
```























































































































