```
GraphSort@[a, b] returns True if the lists a and b, containing a pair of
   vertices and an edge name, are in sorted order and False otherwise.
GraphSort[a List, b List] := GraphSort[a, b] =
    If [a[1]] === b[1],
     If[a[2] === b[2],
      Order[a[3], b[3]] \geq 0,
      SortedQ@{a[2], b[2]}],
     SortedQ@{a[1], b[1]}};
```