

## Warshall's algorithm

### Exercise

Let us consider the graph  $G = (V, A)$  with set of vertices  $V = \{1, 2, 3, 4, 5, 6\}$  and with family of arcs  $A = \{(1, 2), (1, 4), (1, 5), (2, 3), (2, 5), (2, 6), (3, 4), (3, 5), (4, 2), (5, 6)\}$ . Compute the reachable matrix using the Warshall's algorithm. Then obtain the connected components and determine if the graph  $G$  is connected.

## 4. Hamilton paths and Hamilton cycles.

### Exercises

Which of the simple graphs in Figure have a Hamilton cycle or, if not, a Hamilton path?

