## **Graphs**

## **Definition**

The **complete graph**  $K_n$  is the graph with n vertices where every pair of different vertices is connected by an edge (Also called a **clique**).

## **Example**

The cliques  $K_1, \ldots, K_6$ :













$$K_1$$

 $K_2$ 

 $K_3$ 

 $K_4$ 

 $K_5$ 

 $K_6$