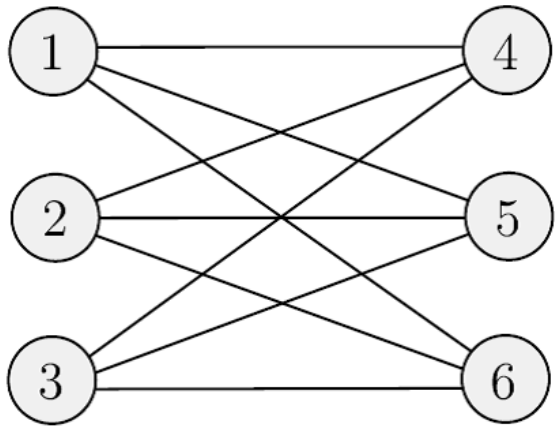
Problem

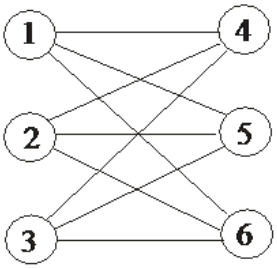
Write a formal description of the following graph.



Step-by-step solution

Step 1 of 3

Given graph:



Comment

Step 2 of 3

Formal description of the graph is

({1, 2, 3, 4, 5, 6}, {(1, 4), (1, 5), (1, 6), (2, 4), (2, 5), (2, 6), (3, 4), (3, 5), (3, 6)})

It shows a set of nodes and a set of edges.

Comment

Step 3 of 3

In a graph G, we say G = (V, E) where V is the set of nodes and E is the set of edges.

$V = \{1,\ 2,\ 3,\ 4,\ 5,\ 6\}$

$E = \{\{1,\ 4\},\ \{1,\ 5\},\ \{1,\ 6\},\{2,\ 4\},\ \{2,\ 5\},\ \{2,\ 6\},\{3,\ 4\},\ \{3,\ 5\},\ \{3,\ 6\}\}$

Comment