

A 10x10 grid of 100 small clusters of black dots, each cluster representing a different number from 0 to 99. The clusters are arranged in a grid where the first row shows numbers 0-9, the second row 10-19, and so on, up to the tenth row showing 90-99. Each cluster is a unique pattern of dots, with some numbers having a single dot and others having many dots in various arrangements.

Figure 1 consists of four sub-diagrams labeled (a), (b), (c), and (d), each showing a set of vertices (dots) and edges (lines) representing different configurations of non-adjacent vertex pairs (u, v) in a graph G .

- (a) shows a path of length 1 between u and v , with u and v at the ends of the path.
- (b) shows a path of length 2 between u and v , with u and v at the ends of the path.
- (c) shows a path of length 3 between u and v , with u and v at the ends of the path.
- (d) shows a path of length 4 between u and v , with u and v at the ends of the path.

• • •