Lab 03: BFS

**Write a program to implement BFS for any given graph.**

**Breadth-first search (BFS)**

Starts at source vertex (root node) and explores the neighbor nodes on each level first, before moving to the next level neighbors.

**Sample Input**

|  |  |
| --- | --- |
|  | A graph from a file Source/root node: 1 |

**Sample output**

|  |  |
| --- | --- |
|  | 1 : distance from source - 0, path -> 1 2 : distance from source – 1, path -> 1,2 3 : distance from source – 1, path -> 1,3 4 : distance from source – 2, path -> 1,2,4  5 : distance from source – 2, path -> 1,2,5 6 : distance from source – 3, path -> 1,2,4,6 |

**Algorithm**

