Case 1:

Enter the number of vertexes of the graph: 5

Enter the number of edges of the graph: 8

Enter the vertex pair for edge 1

V(1): 1

V(2): 3

Enter the vertex pair for edge 2

V(1): 1

V(2): 4

Enter the vertex pair for edge 3

V(1): 1

V(2): 5

Enter the vertex pair for edge 4

V(1): 2

V(2): 3

Enter the vertex pair for edge 5

V(1): 2

V(2): 5

Enter the vertex pair for edge 6

V(1): 3

V(2): 4

Enter the vertex pair for edge 7

V(1): 3

V(2): 5

Enter the vertex pair for edge 8

V(1): 4

V(2): 5

The adjacency list representation for the given graph:

1-> { 3 4 5 }

2-> { 3 5 }

3-> { 1 2 4 5 }

4-> { 1 3 5 }

5-> { 1 2 3 4 }