BRAC UNIVERSITY

DEPARTMENT OF CSE

CSE 221 LAB FINAL SECTION 6

**Question:** *Implement Kruskal’s algorithm to detect a cycle in a given graph.*

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| **Sample Input:**  An undirected graph:    **Sample Input:** | **Sample Output:**  The graph is cyclic  Edges creating the cycle:  1-3  1-2  2-5  3-4  **Sample output:**  The graph is not cyclic |

**Bonus Question:**

*Implement BFS on a given UNDIRECTED graph and show the number of connected components in it.*

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| **Sample input 1:**  An un-weighted undirected graph    **Sample input 2:**    **Sample Input 3:** | **Sample Output 1:** Number of connected components: 2  **Sample Output 2:**  Number of connected components: 5  **Sample Output 3:**  Number of connected components: 1 |