## **Assignment 3**

- 1. Write a Prolog program that takes a student's marks as input and returns their grade according to the following rules:
- Marks  $\geq$  90  $\rightarrow$  grade = excellent
- Marks >= 75 and < 90  $\rightarrow$  grade = good
- Marks >= 50 and < 75  $\rightarrow$  grade = average
- Marks  $< 50 \rightarrow grade = fail$
- 2. Store all edges of Graph A and check the any path is exist or not.
- 3. Implement Breadth-First Search (BFS) traversal of Graph A in Prolog.
- 4. Implement Depth-First Search (DFS) traversal of Graph A in Prolog.

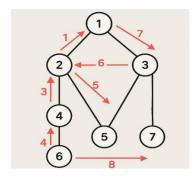


Fig.1: Graph A