## Input for Minimum Spanning Tree algorithm:

Input when asked for number of bridges: 7

Input for network description

B1: DEFGH

B2: C E

B3: A C

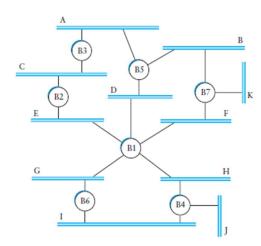
B4: H I J

B5: A B D

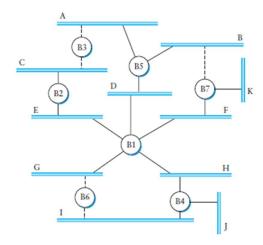
B6: G I

B7: B F K

## **Initial Network:**



## After stabilization:



## **Expected Output:**

- B1: D-Designated. E-Designated. F-Designated. G-Designated. H-Designated.
- B2: C-Designated. E-Active
- B3: All ports closed.
- B4: H-Active I-Designated. J-Designated.
- B5: A-Designated. B-Designated. D-Active
- B6: All ports closed.
- B7: B-Closed F-Active K-Designated.
  - If one lan is added to network, which is connected to the bridge B6.
  - Then input:

7

- B1: DEFGH
- B2: C E
- B3: A C
- B4: H I J
- B5: A B D
- B6: G1L
- B7: B F K
- Output:
  - B1: D-Designated. E-Designated. F-Designated. G-Designated. H-Designated.
  - B2: C-Designated. E-Active
  - B3: All ports closed.
  - B4: H-Active I-Designated. J-Designated.
  - B5: A-Designated. B-Designated. D-Active
  - B6: G-Active I-Closed L-Designated.
  - B7: B-Closed F-Active K-Designated.

Because B6 can't be closed then as it's the only bridge connected to lan L.