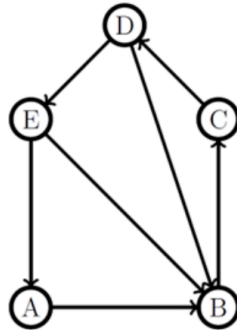


Name - Jaichandra Jadhav

ID - 801352267

Analyze the network depicted in the figure. Identify the nodes with the lowest and highest ranks post-application of the **PageRank algorithm**. Provide a brief rationale for your selection.



Looking at the network diagram, I analyzed how the nodes are ranked after applying the PageRank algorithm.

Overview of the PageRank Algorithm

PageRank determines the importance of a node by analyzing the pattern of links:

- Nodes with more incoming links from well-connected nodes usually have higher ranks.
- A node's rank is shared equally among the nodes it links to.

Analysis of Nodes

Node with the Highest Rank:

- **Node B** probably has the highest rank because:
 - It receives links from **Nodes A, D, and E**.
 - These incoming links, especially from nodes with fewer outgoing connections, significantly contribute to Node B's rank.

Node with the Lowest Rank:

- **Node A** likely has the lowest rank because:
 - It doesn't receive any incoming links.
 - It only links to **Node E**, which leaves it isolated in terms of gaining rank from others.

Final Thoughts

- **Highest Rank (Node B):** Multiple incoming links make it central and important in the network.
- **Lowest Rank (Node A):** No incoming links mean it can't gather rank, leaving it less significant.