The results of the five graph analytics tasks make logical sense and provide meaningful structural insights into the ego network:

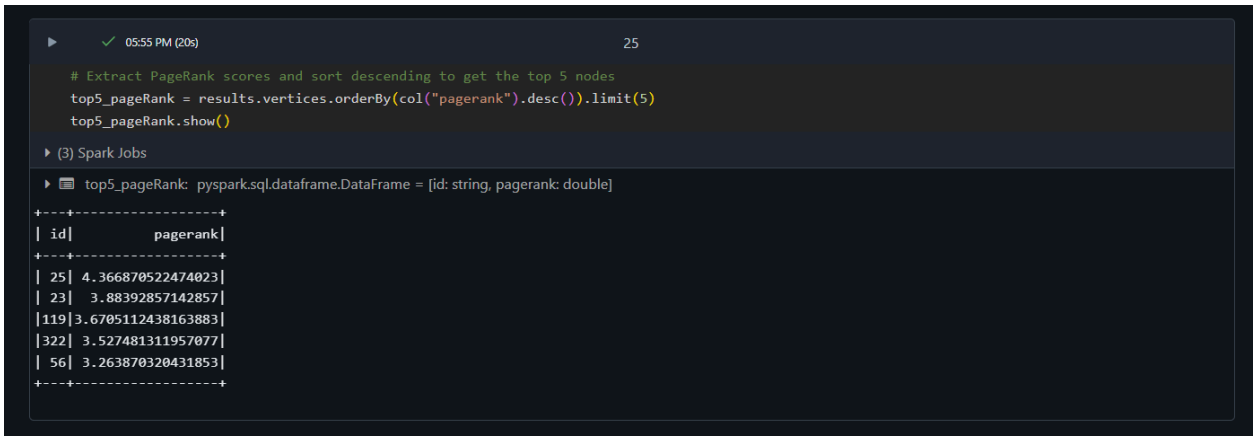
## (a) Top 5 Nodes with Highest Outdegree:


- Nodes with the highest outdegree represent users who initiate the most connections (e.g., they follow many others in directed networks).
- This makes sense for social platforms like Twitter or G+ where following is one-way.
- **Insight:** These users are likely to be active explorers or information seekers.

## (b) Top 5 Nodes with Highest Indegree


- Nodes with the highest indegree are the most followed users.
- These are likely to be **influential or popular accounts**, attracting many connections.
- **Insight:** High indegree is often a good proxy for social influence or authority in the network.

## (c) Calculate PageRank and Find Top 5 Nodes

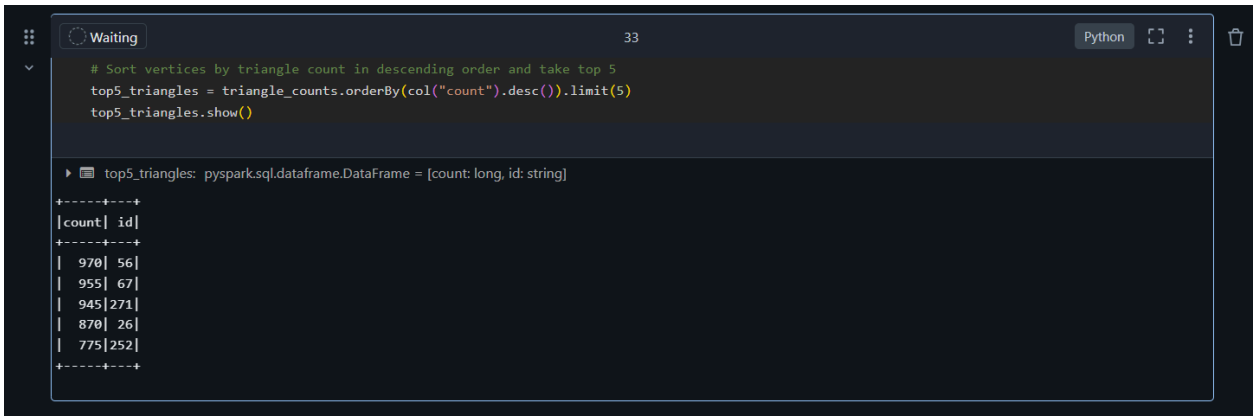



- PageRank highlights not just how many connections a node has, but also how important those connections are.
- The top-ranked nodes are well-connected to **other well-connected nodes**.
- **Insight:** These are central and influential users in the network, potentially acting as key bridges or hubs of information flow.

## (d) Connected Components: Top 5 Largest Components


- Each connected component is a cluster of users where every user is reachable from every other.
- The largest components likely represent **tight-knit communities or friend groups**.
- **Insight:** Ego networks often contain multiple clusters — some users may form isolated cliques, while others belong to large, interconnected groups.

## (e) Triangle Counts: Top 5 Vertices by Triangle Count




- Triangle count measures how interconnected a user's friends are (i.e., how many "friend-of-a-friend" connections exist).
- High triangle counts indicate **dense local communities**.
- **Insight:** These users likely belong to social circles where mutual friendships are common — good candidates for community detection or circle inference.