ID: 27377

**Instagram:**

**Networked System:**

\* Connects users worldwide for sharing photos, videos, and stories.

\* Manages user profiles, followers, and the content they share.

\* Delivers content to user feeds and the "Explore" page.

\* Facilitates direct messaging between users.

\* Supports features like live videos and reels through network infrastructure.

**Parallel Computing (Behind the Scenes):**

\* Processes the massive volume of daily photo and video uploads.

\* Powers algorithms that rank content for user feeds and the "Explore" page.

\* Analyzes user behavior and data to personalize content recommendations.

\* Handles the computational demands of serving targeted advertisements.

\* Supports advanced features like image and video analysis (e.g., object recognition).

**Facebook (Now Meta):**

**Networked System:**

\* Connects billions of users for sharing updates, photos, videos, and engaging in communities.

\* Manages complex user profiles, relationships (friendships), and social graphs.

\* Delivers personalized news feeds, stories, and other content.

\* Supports various communication channels like Messenger and group chats.

\* Facilitates real-time interactions, notifications, and event management across a vast network.

**Parallel Computing (Behind the Scenes):**

\* Powers the sophisticated algorithms that rank content for individual news feeds.

\* Processes the enormous amount of daily image and video uploads.

\* Analyzes the intricate social graph to understand connections and suggest friends or groups.

\* Drives the complex advertising system for serving targeted ads to a global audience.

\* Supports search indexing across the vast amount of user-generated content.

\* Underpins computationally intensive features like facial recognition and AI-driven content moderation.

\* Crucial for developing and running resource-intensive initiatives like the Metaverse.