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## Log Search Example: Identify Most Active Users

### ✅ Step 2: Run the Query

```
_sourceCategory=labs/aws/cloudtrail  
| json field=_raw "userIdentity.userName"  
| count by userIdentity.userName  
| sort by _count desc
```

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### 🔍 Query Breakdown

1. **\_sourceCategory=labs/aws/cloudtrail**
    - Filters logs to only include data from AWS CloudTrail events in the labs/aws/cloudtrail category.
  2. **json field=\_raw "userIdentity.userName"**
    - Extracts the userName field from the userIdentity object inside the raw log.
    - This value represents the AWS **user account** that performed the action (e.g., AdminUser, EC2ServiceRole, Alice).
  3. **count by userIdentity.userName**
    - Groups all logs by the extracted userName.
    - Counts the number of actions/events each user generated.
    - Summarizes activity per user instead of showing raw logs.
  4. **sort by \_count desc**
    - Sorts the results by frequency in descending order.
    - Users with the **most activity appear at the top** of the results.
    - Helps identify the **most active or potentially suspicious accounts**.
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### 📌 Importance of This Query

- **Detect Usage Patterns:** Quickly see which AWS users are generating the most events.
- **Spot Anomalies:** If a service account or low-privileged user suddenly has unusually high activity, it might indicate compromise.

- **Prioritize Investigations:** High-frequency users can be reviewed first to ensure activity is legitimate.
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#### **Summary:**

This query helps analysts **profile user activity** by counting how many CloudTrail events each AWS user generated. The **count by** operator groups data per user, while **sort by \_count desc** highlights the **most active accounts immediately**.