**Use of transaction logs for data recovery**

* They can be used to recover the database to a consistent state in the event of a failure.: This is because transaction logs record all of the changes that have been made to the database since the last time the log was backed up.
* They can be used to roll back incomplete transactions.: This ensures that the database is not left in an inconsistent state.
* They can be used to audit the database.: Transaction logs can be used to track who made changes to the database and when they made them. This can be helpful for troubleshooting problems and for ensuring that the database is being used properly.

Overall, transaction logs are an important tool for data recovery. They can be used to protect the database from failure and to ensure that it is always in a consistent state.

**Scenario:**

Hypothetical scenario where a transaction log is instrumental in data recovery after an unexpected shutdown:

A company uses a database management system (DBMS) to store its customer data. The DBMS uses a transaction log to record all of the changes that are made to the database. One day, the power goes out and the server that the DBMS is running on unexpectedly shuts down.

When the server comes back up, the DBMS uses the transaction log to recover the database to a consistent state. The transaction log contains records of all of the changes that were made to the database before the shutdown, so the DBMS is able to undo any incomplete transactions and restore the database to the state it was in before the power went out.

In this scenario, the transaction log was instrumental in data recovery. Without the transaction log, the company would have lost all of the changes that were made to the database since the last backup.