## Lab 4 Assessment

How does backup retention period affect storage costs?

The longer you keep backups, the more storage you pay for. When I set the retention to 14 days instead of 7 days, I'm basically paying for double the backup storage. AWS charges for the storage space used by all those daily automated backups, so if you keep them for months, it can add up to real money.

What's the difference between manual snapshots and automated backups?

Automated backups happen every day during the backup window I set, and AWS automatically deletes old ones based on the retention period. Manual snapshots are ones I create myself whenever I want, and they stick around until I manually delete them. Automated backups also enable point-in-time recovery, while manual snapshots only let you restore to the exact time the snapshot was taken.

How long did the point-in-time recovery process take?

The point-in-time recovery took about 18 minutes to create the new restored instance. It's not super fast, but considering it had to create a whole new database instance and restore all the data to a specific point in time, that's pretty reasonable. You definitely wouldn't want to rely on this for quick fixes.

What are the limitations of point-in-time recovery?

You can only recover to any point within your backup retention period - so if I set it to 14 days, I can't go back further than that. Also, it creates a completely new database instance, so you have to update your applications to point to the new endpoint. And there's always some small amount of data loss - maybe a few seconds - because the recovery might not capture the very latest transactions.