

Question 1 explores the roles associated within the data management and security field. There are four identified roles; Data administrator (DA), Database Administrator (DBA), Logical database Designers, and Physical Database Designers.

The roles of DA's and DBA's are fairly similar, but the tasks they perform differ with how they interact with the database and the data.

DA's will be more focused on the upkeep and daily use of the database, ensuring that the data is securely and properly assessed, they also plan out some of the design aspects of the database, likely looking at making it work for end users, and providing support to users when needed.

DBA's are responsible for the development and implementation of the database, playing a role in the physical design of the DB. This is a more indepth technical role and would require more knowledge of the DB than someone is a DA role.

Logical Database Designers look at the actual data that will be used in the DB, understanding how the data should be used and treated within the organisation.

Physical database designers will be concerned with how the DB is actually built and implemented, looking at the physical hardware side where the DB software will be run, either on external server services or on local servers maintained by their business. They will look at optimisation of hardware and software to ensure quick and reliable access to the DB.

Question 2/3: More Roles (seek)

Database Coordinator (Ray White)

- User support
- Reporting
- Data quality
- Relocation of data
- User training

Skills

- Friendly/approachable
- Review and understand new applications
- VaultRe or CRM experience
- Ability to prioritise

Database Administrator (CSIRO)

- Lifecycle maintenance
- Performance analysis
- Produce and maintain technical documentation
- Initiate change
- Develop standards, guidelines, procedures
- Service restoration

Skills

- Administration experience with PostgreSQL server
- Linux knowledge - Scripting
- Experience with technical support
- Experience with database monitoring tool
- Experience with configuration and automation tool - Puppet

Application and Database Analyst (City of Casey)

- Design, develop and implement SSIS, PowerBI solutions
- Plan and implement regular business upgrades
- Provide support
- Documentation

Skills

- Knowledge of SQL databases
- System performance
- Monitoring, recovery

Data Scientist/Database Engineer (La Trobe University)

- Managing data acquisition, storage, analysing and visualising pipelines
- Day-to-day of procedures
- Ensuing proper data management and requirement following

Skills

- Knowledge in the services infrastructure
- Experience in the conduct of service development
- Knowledge in research data management principles and practices

Question 4

	DB Coordinator	Database Analyst	DB Scientist/Engineer
Skills	<ul style="list-style-type: none">- User support- Able to adapt to new systems/applications- Experience in applications	<ul style="list-style-type: none">- SQL DB knowledge- System performance- Systems monitoring performance	<ul style="list-style-type: none">- Services knowledge- Experience in service development- Knowledge on data management and practices
Personal Attributes	Able to help users, adapt to new systems. No/little experience with DB systems	Little experience with SQL No knowledge in systems performance monitoring and maintenance	Little to no knowledge with these points
Personal Development over 5 years	Get used to systems wanted by companies	Learn how to perform these tasks	Get an understanding of these points and gain experience

Links

“Application and Database Analyst Job in Narre Warren, Melbourne VIC.” *SEEK*,

www.seek.com.au/job/68409532?type=standout#sol=cf8bea9e00afbdc68da1b2893b367cc80cffd1ef. Accessed 30 June 2023.

“Data Scientist/Database Engineer Job in Bundoora, Melbourne VIC.” *SEEK*,

www.seek.com.au/job/68379775?type=standard#sol=7db776a379e7311ddb08750894deb2a461664d9c. Accessed 30 June 2023.

“Database Coordinator Job in Surfers Paradise, Gold Coast QLD.” *SEEK*,

www.seek.com.au/job/68433422?type=standout#sol=628f7c881ba9616d0a6e28f539695f038a8d4bf4. Accessed 30 June 2023.

“PostgreSQL Database Administrator Job in Clayton, Melbourne VIC.” *SEEK*,

www.seek.com.au/job/68427204?type=standout#sol=de5c85e60d009da3c23f59d11a2aca259d6d2dad. Accessed 30 June 2023.