C1: Top 20 Behavioural Interview Questions

- 1. Tell me about yourself.
- 2. Walk me through your resume.
- 3. Why are you interested in this role and our organisation?
- 4. What motivates you to work in data-related roles?
- 5. Describe a time you managed multiple priorities or projects at once. How did you handle it?
- 6. How do you deal with stress or tight deadlines?
- Tell me about a time you faced a conflict within a team. How did you handle it?
- 8. Describe a situation where you had to explain a technical concept to a non-technical audience.
- 9. Tell me about a mistake you made in a project. How did you handle it and what did you learn?
- 10. Give an example of a time you identified a problem and used data to solve it.
- 11. Tell me about a time when you had to work with incomplete or messy data. What did you do?
- 12. Describe a challenging project you worked on and how you managed it.
- 13. How do you prioritise tasks when everything seems urgent?
- 14. Tell me about a time you received constructive criticism. How did you respond?
- 15. Have you ever disagreed with your manager or stakeholder on an approach? What did you do?
- 16. Tell me about a time you improved a process using data or technology.
- 17. Give an example of working in a cross-functional team (e.g., IT, business, operations).

- 18. How do you make sure your work aligns with business goals?
- 19. What are your long-term career goals, and how does this role fit in?
- 20. Why do you want to work in Northern Territory, specifically?

C2: Top 20 Technical Questions

(These are tailored to your CV: SQL, Power BI, Python, Data Studio, Excel, Transformer-based NLP project, NT Government Fuel Analysis project, Software Testing, GitHub, etc.)

- 1. Walk me through a project where you used SQL extensively. Can you write a query to find the top 5 products by sales in each region?
- 2. What are window functions in SQL, and when would you use them?
- 3. How do you optimise a slow SQL query?
- 4. In Power BI, how do you build a dynamic dashboard? Can you explain DAX measures you've created?
- 5. How would you handle large datasets in Power BI without performance issues?
- 6. Can you explain how you used Google Data Studio for KPI monitoring at Daraz?
- 7. Compare Excel vs SQL vs Power BI for reporting. When would you use each?
- 8. In your Transformer-based NLP thesis, what was the biggest challenge in handling Bengali text?
- 9. How do Transformer models (like BERT) differ from traditional RNN/LSTM approaches?
- 10. You mentioned working on bird audio classification with AST. What input preprocessing steps were required?
- 11. Can you explain loop invariants and how you applied them in algorithm correctness proofs?
- 12. In your software testing project, how did you apply Test-Driven Development (TDD)?
- 13. What tools did you use for code quality (e.g., pylint, flake8)? Why are they important?

- 14. You did an NT Fuel Analysis project—what insights did you extract, and how would you extend it for business use?
- 15. How do you perform data cleaning and preprocessing in Python? Can you share some techniques?
- 16. What Python libraries have you used most in data projects? (e.g., pandas, matplotlib, scikit-learn, transformers)
- 17. How would you design a simple data pipeline for real-time reporting?
- 18. What is the difference between data warehouse vs data lake? Which one did you work closest to?
- 19. How do you approach hypothesis testing and p-value interpretation in your well-being/screen time project?
- 20. You have worked with GitHub—can you walk through your workflow for version control in a data project?

C2: Top 20 Technical Questions (My Resume-Based)

SQL, Databases, and ETL

- 1. You've worked with MySQL, MSSQL, and Oracle PL/SQL. Can you explain key differences between them?
- 2. Write a SQL query to find the top 3 customers with the highest purchase amount in the last 30 days.
- 3. How do you optimise a SQL query that is running slowly?
- 4. What are ETL processes? Walk me through one you have designed or worked on.
- 5. How would you implement a data warehouse for a retail business?

Data Analytics & BI Tools

- 6. Can you explain a project where you used Power BI? How did you use DAX or measures?
- 7. How do you ensure performance in a large Power BI dashboard?
- 8. Compare Excel vs Power BI for analytics—when would you use one over the other?
- 9. Walk me through a time you built an interactive dashboard for stakeholders.

Programming & Development

- 10. You've listed Python and .NET. Can you explain a project where you used them for data/analytics?
- 11. What is FastAPI and how have you used it to build APIs or microservices?
- 12. Explain Object-Oriented Programming (OOP) concepts and how you applied them in your work.
- 13. How do you use Pytest for testing? Can you show an example of a unit test?

14. You've worked with Docker—how would you containerize a data pipeline or ML model?

Machine Learning & NLP

- 15. In your thesis on Transformer-based urgent text detection in Bengali, what challenges did you face and how did you overcome them?
- 16. Explain how a NER (Named Entity Recognition) model works. What improvements did you make at GigaTech?
- 17. You co-authored a publication on sarcasm detection (Ben-Sarc Corpus). What methodology did you use?
- 18. How would you explain deep learning vs traditional ML to a non-technical stakeholder?

Cloud, Collaboration, and Projects

- 19. You've listed AWS and Azure (basic knowledge). What's the difference between cloud-based data warehousing vs on-premise?
- 20. You've used GitHub, Jira, and Teams. Walk me through your workflow for collaborating on a data or ML project with a team.