Amazon Business Intelligence Engineer Interview Questions

Practice for the Amazon Business Intelligence interview with these recently asked interview questions.

- Give me an example of when you used data to make a decision that solved a problem.
- Tell me about the most complex problem you've ever worked on. (See How to Present a Data Science Project.)
- Tell me about a time when you not only met a goal but considerably exceeded expectations.
- Tell me about a time when you were able to deliver an important project under a tight deadline.
- What metrics would you use to predict demand for a ride sharing company?
- The probability of a product coming from location A is 0.8, and from location B is 0.6.
 What is the probability that customers will receive the product from location A or location B?
- If there is a project you have never worked on before, how would you tell that the data you are using for this project is correct and you'll get the correct results?
- What is the difference between OLTP and OLAP?
- How would you set up an online A/B testing scenario, and how would you determine whether or not to roll out a new program given the experiment results?
- What are the different ways of query optimization and performance tuning?
- Describe a SQL JOIN to a non-technical person.
- You have a website, and you need to report the traffic insights on this website to the Product Manager. Write an SQL query to find the top 10 persons who visited the website last month.
- How is variance calculated in PCA?
- How does a random forest generate the forest?
- If we want to know whether people like a product, are there any statistical problems you can see when the analysis is based on their behavior on the website?

Interview Questions

- Describe a scenario for a given leadership principle.
- Tell me about a time you worked outside your comfort zone.
- Tell me about a time you made decisions without consulting your manager.
- Tell me about yourself.

- Describe a time you went against the manager.
- Tell me about a situation where you made a big mistake that cost the company. What did you do?
- Describe a time when you wowed your customers?
- Describe a time when you disagreed with the approach towards solving a problem?
- How do you respond to negative feedback?
- Tell me a time when you did something against the advice of your manager.
- What is one valuable skill you have gained in the last year?
- Tell me a time you took action without doing a lot of research.
- Describe a time where you not only met a goal but considerably exceeded expectations.
- Calculate week-over-week changes in revenue in Tableau.
- What is the difference between ETL and ELT? In what situation do we use which?
- What is the difference between Snowflake schema and Star schema?
- How is the customer churn rate calculated?

Sample Technical Questions -

- How would you decide which product to price cut to improve the sales? You
 will be given all necessary information such as product information, sales,
 etc.
- Given two order tables, explain which type of join should be used.
- What is a foreign key relationship?
- Join two given order tables using the where clause.

Note - SQL questions may be asked on the following topics - joins, group by, where, aggregate, outliers.

Sample Behavioural Questions -

- Give me an example of when you moved forward without your manager's approval. Follow up questions undefinedundefined
- Questions based on customer obsession undefinedundefined
- Give an example of a time when you were an outlier among your peers.
- Describe a time when you were compelled to go along with a group decision even when you disagreed.

- What is the most innovative new idea that you have suggested and worked on in a project?
- How did you solve a complex problem with a simple fix?

3. Business Intelligence Analyst round:

This interview will be a technical round. Questions will mostly revolve around SQL, Data Modeling, Data Warehousing, and related concepts.

Sample Questions -

- Design a data model for an American technology giant like Uber.
- What is the difference between a Dimension table and a Fact table?
- Given an order table, use the Rank function to get the highest salaries in each department.
- What are window functions in SQL?
- What will you do if you identify slow-running queries in the SQL server?
- How will you explain Primary key and SQL joins to someone from a nontechnical background?
- Rank the revenue in the given order table without using the rank function.

Note: Questions related to SQL filtering may be asked.

4. Bar Raiser round:

For the bar raiser round, questions will be asked related to Amazon's 14 leadership skills.

This interview examines how you influence your peers, deal with situations at work, and whether you are a potential fit for the company. You will also be asked a lot of follow-up questions to truly dig deep into your experience.

- Give me an example of a time when you successfully recommended a solution to a client.
- What is the proudest moment of your career which you not only achieved but also surpassed yourself?
- You've been dissatisfied with the current situation at work. What did you do to make things different? Were you able to succeed?
- Describe a time when you were disappointed with a product's quality at work and went out of your way to change it.
- Talk about a time you took a huge risk and it backfired. What went wrong? If you had to do it again, what would you do differently?
- If there is a project you are working on for the first time, how would you verify that the data is valid?

5. Data Scientist round:

This round will be a mix of both technical and behavioral questions. The goal is to ensure that you have the raw technical skills to succeed in this role.

Sample Behavioural questions -

- How do you test your work and measure your success?
- Describe a time when you took a calculated risk. Were you successful?
- How would you handle a disagreement with your manager?

Sample Technical questions -

- How will you predict the success/failure of a newly launched product? How will you find the factors impacting it?
- What factors would you consider to determine whether a campaign conducted by a marketing team is successful or not?
- Design a data model for a school.

Note: Technical questions related to your experience may be asked.