

Warner Bros Discovery Data Engineer Interview Guide – Experienced 2.5+

Round 1: SQL Screening

The first round evaluates your SQL proficiency, focusing on advanced concepts that test problem-solving skills with complex datasets.

Key Focus Areas:

- **CASE WHEN Statements:** Conditional logic for creating new columns or handling data transformations.
- **Typcasting:** Converting data types (e.g., from VARCHAR to INTEGER) to meet query requirements.
- **Slicing:** Extracting subsets of data from strings or lists, often using SUBSTRING or LEFT/RIGHT functions.
- **Window Functions:** Using functions like ROW_NUMBER, RANK, and LAG/LEAD for analytical queries.
- **CTEs (Common Table Expressions):** Temporary result sets for structuring complex queries and improving readability.

Example SQL Question:

Problem: Given a sales table, write a query to find the top three products by revenue in each region, using window functions and CTEs.

```
WITH ranked_products AS (  
  SELECT  
    region,  
    product_id,  
    revenue,  
    RANK() OVER (PARTITION BY region ORDER BY revenue DESC) AS rank  
  FROM  
    sales  
)  
SELECT *  
FROM ranked_products  
WHERE rank <= 3;
```

Tips for Success:

- Practice writing complex queries with multiple JOINS and subqueries.
- Understand the differences between ROW_NUMBER, RANK, and DENSE_RANK.
- Use CoderPad effectively by testing your code iteratively.

Round 2: Python Coding & Data Transformation

This round assesses your ability to manipulate datasets using Python libraries like Pandas or PySpark, along with API data integration.

Task:

You'll be given a dataset and asked to perform a series of data transformations using Pandas or PySpark. Additionally, questions may involve reading data from APIs and designing pipelines.

Key Focus Areas:

- **Pandas Transformations:** Sorting, filtering, aggregating, and merging data.
- **PySpark:** Handling distributed data for larger datasets (if supported).
- **API Integration:** Reading JSON or CSV data from REST APIs using libraries like requests.
- **Pipeline Design:** Structuring ETL (Extract, Transform, Load) processes and discussing optimization strategies.

Example Python Task:

Problem: Given a dataset, perform the following transformations:

1. Filter rows where sales > 1000.
2. Add a new column calculating a 10% discount on sales.
3. Group data by region and calculate total revenue.

```
import pandas as pd

# Sample DataFrame
df = pd.DataFrame({
    'region': ['North', 'South', 'North', 'West'],
    'sales': [1500, 800, 2000, 1200]
})

# Filter rows
df_filtered = df[df['sales'] > 1000]

# Add discount column
df_filtered['discounted_sales'] = df_filtered['sales'] * 0.9

# Group by region and sum sales
df_grouped = df_filtered.groupby('region')['discounted_sales'].sum().reset_index()
print(df_grouped)
```

API Questions:

- How would you fetch data from an API and load it into a DataFrame?
- Discuss API error handling and retry mechanisms.

Tips for Success:

- Practice data transformations using Kaggle datasets.
- Focus on optimizing operations for large datasets (e.g., using `.apply()` vs. vectorized functions).
- Familiarize yourself with REST APIs and data parsing.

Round 3: Fit & Behavioural Interview

This round evaluates your cultural fit, teamwork, and leadership qualities. It often involves non-technical questions designed to understand your motivations and how you handle challenges.

Key Behavioural Questions:

- **Team Dynamics:** How do you handle disagreements within a team?
- **Responsibility & Ownership:** Describe a time when you took ownership of a project and its outcome.
- **Unique Perspective:** What makes an engineer stand out in today's world?
- **Career Goals:** Why are you looking to transition to this role/company?

Glassdoor Warner Bros Discovery Review –

<https://www.glassdoor.co.in/Reviews/Warner-Bros-Discovery-Reviews-E12777.htm>

Warner Bros Discovery Careers –

<https://careers.wbd.com/global/en>

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