Ace the upcoming Data Science Interview

You can't anticipate every question an interviewer will ask. However, there are many **critical questions** that you can prepare before the interview.

Our hiring partners have helped us curate a set of interview questions on key skills, which will help you prepare better for the data science job roles.

☰ Filters

❓ **1. How to create dashboards?**

Basic   Tableau

1. At the bottom of the workbook, click the New Dashboard icon:

2. From the Sheets list at left, drag views to your dashboard at the right

3. To replace a sheet, select it in the dashboard at right. In the Sheets list at left, hover over the replacement sheet, and click the Swap Sheets button.

2. What filters should be applied to rows for specific ops?

Basic   Tableau

The different types of filters used in Tableau are given below. The name of filter types is sorted based on the order of execution in Tableau.

Extract Filters

Data Source Filters

Context Filters

Dimension Filters

Measure Filters

3. Difference between Dimensions and Measures

Basic   Tableau

Dimensions contain qualitative values (such as names, dates, or geographical data). You can use dimensions to categorize, segment, and reveal the details in your data. Dimensions affect the level of detail in the view.

Measures contain numeric, quantitative values that you can measure. Measures can be aggregated. When you drag a measure into the view, Tableau applies an aggregation to that measure (by default).

4. What Are the Different Joins in Tableau

Intermediate   Tableau

There are four types of joins which are used to combine data in Tableau: inner, left, right and full outer. Let's look into it one by one:

Inner:

Inner join results in a table that contains values that have matches in both tables.

Left:

The left join results in a table that contains the values from the left table and corresponding matches from the right table. And in case, if a value in the left table doesn't have a corresponding match in the right table, a null value in the data grid is reflected.

Right:

Right join results in a table which contains all the values form the right table and corresponding matches from the left table. And in case, if a value in the right table doesn't have a corresponding match in the left table, a null value in the data grid is reflected.

Full Outer:

Full outer join results in a table that contains all values from both tables. And a null value is reflected in data grid when a value from either table doesn't have a match with the other table.

5. What is a Calculated Field, and How Will You Create One

Basic   Tableau

Sometimes your data source does not contain a field (or column) that you need for your analysis. For example, your data source might contain fields with values for Sales and Profit, but not for Profit Ratio. If this is the case, you can create a calculated field for Profit Ratio using data from the Sales and Profit fields.

How to create a simple calculated field using an example.

Step 1: Create the calculated field

In a worksheet in Tableau, select Analysis > Create Calculated Field.

In the Calculation Editor that opens, give the calculated field a name.

In this example, the calculated field is called Profit Ratio.

Step 2: Enter a formula

In the Calculation Editor, enter a formula.

This example uses the following formula:

SUM([Profit])/SUM([Sales])

6. What Is a Parameter in Tableau

Intermediate   Tableau

A parameter is a global placeholder value such as a number, date, or string that can replace a constant value in a calculation, filter, or reference line.

For example, you may create a calculated field that returns True if Sales is greater than $500,000 and otherwise returns False. You can replace the constant value of "500000" in the formula with a parameter. Then, using the parameter control, you can dynamically change the threshold in your calculation

7. What is the Use of Dual-axis

Intermediate   Tableau

Dual axes are two independent axes that are layered on top of each other. According to Tableau, dual axes allow you to compare multiple measures. Dual axes are useful when you have two measures that have different scales.

8. What is the Difference Between Treemaps and Heat Maps

Basic   Tableau

A heat map is a two-dimensional representation of information with the help of colours. Heat maps can help the user visualize simple or complex information.

Treemaps are ideal for displaying large amounts of hierarchically structured (tree-structured) data. The space in the visualization is split up into rectangles that are sized and ordered by a quantitative variable. The levels in the hierarchy of the treemap are visualized as rectangles containing other rectangles. Each set of rectangles on the same level in the hierarchy represents a column or an expression in a data table. Each individual rectangle on a level in the hierarchy represents a category in a column.

❓ 9. What is the Difference Between .twbx And .twb

Basic   Tableau

Tableau Workbook File (TWB) is an XML document. It contains the information about your sheets, dashboards and stories. The TWB file references a data source file such as Excel or TDE, and when you save the TWB file, it is linked to the source.

The most important thing to remember about TWB files is that they don't contain any data – if you want to share your workbook, therefore, you will need to send both the Tableau Workbook File and the data source file.

Tableau Packaged Workbook (TWBX) is a package of files "compressed" together. It includes a data source file, TWB, and any other file used to produce the workbook (including images).

TWBX is intended for sharing. It does not link to the original file source; instead, it contains a copy of the data that was obtained when the file was created. TWBX files are usually used as reports and can be viewed using Tableau Viewer.

TWBX isn't designed for auto-updating. If you refresh/update the source file, TWBX will stay unchanged. If you want your workbook to update when the source file is updated, you need to use the TWB file format.

❓ 10. Explain the Difference Between Tableau Worksheet, Dashboard, Story, and Workbook

Basic   Tableau

Tableau uses a workbook and sheet file structure, much like Microsoft Excel.

A workbook contains sheets, which can be a worksheet, dashboard, or a story.

A worksheet contains a single view along with shelves, legends, and the Data pane.

A dashboard is a collection of views from multiple worksheets.

A story contains a sequence of worksheets or dashboards that work together to convey information.

? 11. How many maximum tables can you join in Tableau

> Basic   Tableau

Hint?

? 12. Explain Pareto chart and how is it created in Tableau

> Intermediate   Tableau

A Pareto chart is a type of chart that contains both bars and a line graph, where individual values are represented in descending order by bars, and the ascending cumulative total is represented by the line.

For creating Tableau Pareto Chart first we have to create a bar chart.

Create a bar graph that shows Sales by Sub-Category in downward-sloping order.

i. Connect to the Sample – Superstore knowledge supply.

ii. From the size space of the information pane, drag Sub-Category to Columns.

iii. From the Measures space of the information pane, drag Sales to Rows.

iv. Click Sub-Category on Columns and select kind.

In the kind panel, do the following:

i. Under the kind order, select downward-sloping.

ii. Under kind by, select Field.

iii. Leave all alternative values unchanged, as well as Sales because the chosen field and add because of the chosen aggregation.

iv. Click alright to exit the type panel.

Products area unit currently sorted from highest sales to lowest.

Add a Line Chart

Add a Line Chart that additionally shows Sales by Sub-Category

i. From the Measures space of the information pane, drag Sales to the so much right of the read, till a line appears

ii. Drop Sales, to make a dual-axis read. it is a bit exhausting to envision that there area unit 2 instances of the Sales bars at now, as a result of they're organized identically.

iii. Select SUM(Sales) (2) on the Marks card, and alter the mark kind of Line.

Add a Table calculation to the road chart to indicate sales by Sub-Category as a running total and as a p.c of total

i. Click the second copy of SUM(Sales) on Rows and select Add Table Calculation.

ii. Add a primary table calculation to SUM(Sales) to gift sales as a running total.

iii. Choose Running Total because of the Calculation kind.

iv. Do not shut the Table Calculation panel.

v. Add a secondary table calculation to gift the information as a p.c of the overall.

vi. Click Add Secondary Calculation and select p.c of Total because of the Secondary Calculation kind.

vii. This is what the Table Calculation panel ought to appear as if at this point:

viii. Click the X in the upper-right corner of the Table Calculations panel to shut it.

ix. Click color the Marks card to vary the color of the road.

❓ 13. Introduce yourself/Tell us about yourself

Basic   HR

Hint?
• Keep the answer crisp and short- 60 to 90 sec • Focus on personality, achievements and relevant interests. • Don't elaborate on family background.

? 14. Why do you want to leave your current organization?

Basic   HR

Hint?

• Focus on the new opportunity and growth prospects. • Avoid speaking anything negative about your current organization

? 15. What are your strengths?

Basic   HR

Hint?

Give 3 strengths, with relevant examples from work

? 16. What are your weaknesses?

Basic   HR

Hint?

Give genuine weaknesses and explain what you are doing to overcome them.

? 17. Why do you want to join our company?

Basic   HR

Hint?

• Talk about how it fits into your career goals. • Highlight the cultural fit and quality of work done by the company

? 18. How do you typically respond to problems?

Intermediate   HR

Hint?

Explain a systematic plan of approach with an example

19. What significant goals have you set for yourself in the past? Have you achieved those?

Intermediate   HR

Hint?

Highlight the stepwise planning done for realizing major goals in the past.

20. You have worked in the IT sector for so long, why is there a sudden interest in analytics?

Intermediate   HR

Hint?

• Explain about the importance of analytics across organizations. • Steps taken by you to move into analytics • How your exposure to technology and experience of working on projects from various sectors will help you excel.

21. Have you worked on any analytics projects or assignments?

Basic   HR

Hint?

• Work experience (if relevant) • Capstone project • Relevant assignments

22. Please describe your future career goals

Intermediate   HR

Hint?

Ensure career growth is explained as per the expected career progression in the sector.

23. Do you have any idols? In what way do they inspire you?

Basic   HR

Hint?

Be well prepared about the person you name.

? **24. What are your interests and hobbies? What do you do in your free time?**

Basic   HR

Hint?

Name 2/3 things that you are passionate about. Be thorough about your hobbies, it's a great way to impress the interviewer

? **25. What has been your biggest achievement at work?**

Intermediate   HR

Hint?

Elaborate on the achievement and the process followed.

? **26. Do you prefer working as an individual contributor or managing a team?**

Intermediate   HR

Hint?

Explain based on your previous work experience and the role you are interviewing for

? **27. Do you have any questions for us?**

Basic   HR

Hint?

You may ask questions related to project, role etc.