

TABLEAU MASTER PRACTICAL LAB (FULLY HANDS-ON, NO THEORY)

Dataset Recommended: Sample – Superstore (comes pre-installed with Tableau)

Total Tasks: 50 Practical Tasks

SECTION A — DATA CONNECTION & PREP (Tasks 1–10)

1. Connect to the “Sample – Superstore” Excel file and load all 3 sheets.
2. Create a relationship between Orders and People using Region.
3. Create a join between Orders and Returns; fix row duplication.
4. Convert the connection to Extract and create a .hyper file.
5. Reduce extract size by including only years 2017–2019.
6. Create a calculated field to convert Order Date to Month-Year.
7. Create Category → Sub-Category → Product Name hierarchy.
8. Split Customer Name into First & Last Name.
9. Apply Data Source Filter: Sales > 0.
10. Create a group combining Phones + Accessories as Tech Gear.

SECTION B — VISUAL BUILDING (Tasks 11–20)

11. Bar chart: Sales by Sub-Category.
12. Convert to horizontal bar chart.
13. Monthly Sales line chart.
14. Heatmap: Sales by Category and Region.
15. Dual-axis: Sales (Bar) + Profit (Line).
16. Scatter plot: Sales vs Profit.
17. Treemap: Sales by Sub-Category.
18. Pareto chart for Sub-Category Sales (show 80% line).
19. Filled map: Sales by State.

20. Build sparklines for each Sub-Category.

SECTION C — CALCULATIONS & LOD (Tasks 21–35)

21. Create Profit Ratio field.

22. Customer Value Classification (High/Med/Low).

23. Parameter to select metric (Sales/Profit/Quantity).

24. YOY Growth % using table calculation.

25. LOD: Customer Lifetime Value.

26. FIXED LOD for total sales ignoring filters.

27. INCLUDE LOD for daily sales on monthly view.

28. EXCLUDE LOD removing Region from granularity.

29. Create 50-sized Sales bins via calc.

30. Filter customers with >3 orders using LOD.

31. Find first purchase date per customer.

32. Running Sum of Sales chart.

33. 3-month Moving Average line.

34. Rank Sub-Categories using RANK().

35. Top N Customers via parameter.

SECTION D — PARAMETERS & INTERACTIVITY (Tasks 36–45)

36. Parameter to switch between Bar & Line (sheet swap).

37. Parameter for Year/Quarter/Month view.

38. Dashboard: Click State → filter product table.

39. Add Highlight Action on hover.

40. Set Actions: Select Category → focus Sub-Categories.

41. Add Region dropdown filter.

42. Add Product Name search filter.

43. Dynamic dashboard title.

44. Top 5/10/15 via parameter.

45. Add Reset Filters button.

SECTION E — DASHBOARDS & UX (Tasks 46–50)

46. Build 3 KPI tiles: Sales, Profit, Profit Ratio.

47. Add Trend Line + Category Breakdown.

48. Add Map with Filter Action.

49. Format dashboard (spacing, fonts, colors, tooltips).

50. Publish dashboard to Tableau Public.