



ASSIGNMENT-4 Question Bank

Practice questions for common functions

Aggregate & Conditional Functions (SUM, AVERAGE, COUNT, MAX, MIN) (1–25 Questions)

1. Find the total sales amount ($\text{QUANTITY} \times \text{PRICE_PER_UNIT}$) for all records.
2. Calculate the total sales amount for each brand.
3. Find the total quantity sold of laptops in Tamil Nadu.
4. Calculate the total sales of smartphones in Kerala.
5. Find the average price per unit for all HP products.
6. Find the average quantity sold for each product category.
7. Calculate the average price per unit for Laptop category in Andhra Pradesh.
8. Find how many sales transactions (rows) exist in the dataset.
9. Count the number of unique brands in the dataset.
10. Use COUNTA to count non-empty entries in the column STATE.
11. Count how many sales happened in 2025 using COUNTIFS.
12. Use COUNTIFS to count how many HP Pavilion 14 laptops were sold in Chennai.
13. Calculate the total revenue for the ASUS brand using SUMIFS.
14. Find the total revenue generated in Andhra Pradesh.
15. Use SUMIFS to find the total revenue for MSI laptops in Kerala.
16. Find the maximum price per unit for laptops sold in Hyderabad.
17. Find the minimum price per unit among all Smartphones.
18. Use MAXIFS to get the highest price per unit for each brand in Tamil Nadu.
19. Use MINIFS to find the lowest quantity sold for HP products in Karnataka.
20. Use MAXIFS to get the most expensive product per brand in Andhra Pradesh.
21. Find the minimum price per unit for laptops sold in 2024 using MINIFS.
22. Find the maximum price per unit for smartphones sold in 2025.
23. Use AVERAGEIFS to get the average unit price for each brand in Kerala.
24. Use SUMIFS to calculate the total quantity sold for each city.
25. Find how many sales entries belong to each state using COUNTIFS.

Text Functions (LEFT, RIGHT, LEN, UPPER, LOWER, PROPER, CONCATENATION, SUBSTITUTE) (26–50 Questions)

1. Extract the **first 3 letters** of each BRAND_NAME using LEFT.
2. Extract the **last 2 characters** from each SALEID using RIGHT.
3. Find the **length** of each PRODUCT_NAME using LEN.
4. Convert all BRAND_NAME values to **UPPERCASE** using UPPER.
5. Convert all PRODUCT_NAME values to **lowercase** using LOWER.
6. Format all CITY names to **Proper Case (Title Case)** using PROPER.
7. Combine CITY and STATE into a single column using **concatenation**.
8. Combine BRAND_NAME and PRODUCT_NAME with a hyphen between them using **& operator**.
9. Create a new column combining SALEID, CITY, and DATE using CONCAT.
10. Use SUBSTITUTE to replace the word “Laptop” with “Notebook” in the PRODUCT_CTG column.
11. Use SUBSTITUTE to change all spaces in PRODUCT_NAME to underscores _.
12. Extract the **state code** (first 2 letters of STATE) using LEFT.
13. Create a **short product code** by combining the first 2 letters of BRAND_NAME and last 3 digits of SALEID.
14. Find the **total number of characters** in each CITY name using LEN.
15. Use UPPER and CONCAT to generate a unique **Product Key** in the format:
 BRAND_PRODUCT_CITY.
16. Replace all instances of “HP” with “Hewlett Packard” in BRAND_NAME using SUBSTITUTE.
17. Extract the **month part** from the DATE column using MID or TEXT.
18. Use RIGHT to extract the **year** from the DATE column.
19. Concatenate QUANTITY and PRICE_PER_UNIT into a text like: “Qty: x | Price: y”.
20. Use LEN to find the **longest product name** in the dataset.
21. Use PROPER to standardize brand names that are all lowercase or uppercase.
22. Combine PRODUCT_CTG, BRAND_NAME, and PRODUCT_NAME with “–” separator using TEXTJOIN.
23. Use SUBSTITUTE to replace all occurrences of “Omen” with “OMEN-Series” in PRODUCT_NAME.
24. Use LEFT and RIGHT together to extract **middle characters** from SALEID.
25. Concatenate STATE and the **last two digits of SALEID** to form a custom sales region code.

BASIC MATH FUNCTIONS

1. The temperature difference between two cities is -7°C. Use ABS() to find the positive difference.
2. A company’s profit/loss column contains both positive and negative values. Use ABS() to find the total absolute profit/loss for each entry.

3. SQRT (Square Root)
4. Find the square root of 625 using SQRT().
5. A circle has an area of 314 cm². Use SQRT() and π to calculate its radius (formula: $\sqrt{\text{Area}/\pi}$).
6. POWER (Exponentiation)
7. Use POWER() to find 3⁵ (3 raised to the power 5).
8. The radius of a sphere is 6 cm. Use POWER() to find r³ (for volume calculation formula).
9. INT (Integer Part of Number)
10. The number in cell A1 is 45.89. Use INT() to get the integer part.
11. If you have a list of decimal prices, use INT() to show only the whole rupees.
12. TRUNC (Truncate without rounding)
13. Truncate the value 12.9876 to two decimal places using TRUNC().
14. A product price is 456.999, but only two decimals are allowed in the billing system — use TRUNC() to fix it.
15. ROUND (Round to nearest)
16. Round 56.7894 to 2 decimal places using ROUND().
17. Round 1987.5 to the nearest whole number.
18. ROUNDUP (Always round higher)
19. Use ROUNDUP() to round 5.123 to 1 decimal place.
20. If a project duration is 7.2 weeks, round it up to the next whole week.
21. ROUNDDOWN (Always round lower)
22. Use ROUNDDOWN() to round 58.976 to 1 decimal place.
23. A student scored 92.98 marks. Round it down to the nearest integer using ROUNDDOWN().
24. RAND (Random decimal between 0 and 1)
25. Use RAND() to generate a random discount percentage between 0% and 1%.
26. Multiply the result of RAND() by 100 to simulate a random score between 0 and 100.
27. RANDBETWEEN (Random integer in a range)
28. Use RANDBETWEEN(1, 6) to simulate a dice roll.
29. Use RANDBETWEEN(1000, 9999) to generate a random 4-digit OTP.