To calculate the requested ratios for both years (2024 and 2023), I'll extract the necessary data from the balance sheet and profit and loss statements for the year ending March 31, 2023, and compare it with the calculations for 2024.

Here are the steps and formulas:

Formulas for Ratios:

1. **Current Ratio** = Current AssetsCurrent Liabilities\frac{\text{Current Assets}}{\text{Current Liabilities}}
2. **Liquid Ratio** = Current Assets−InventoryCurrent Liabilities\frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}
3. **Debt-Equity Ratio** = Total LiabilitiesEquity\frac{\text{Total Liabilities}}{\text{Equity}}
4. **Total Asset to Debt Ratio** = Total AssetsTotal Liabilities\frac{\text{Total Assets}}{\text{Total Liabilities}}
5. **Proprietary Ratio** = EquityTotal Assets\frac{\text{Equity}}{\text{Total Assets}}
6. **Inventory Turnover Ratio** = COGSAverage Inventory\frac{\text{COGS}}{\text{Average Inventory}}
7. **Working Capital Turnover Ratio** = Net RevenueWorking Capital\frac{\text{Net Revenue}}{\text{Working Capital}}
8. **Fixed Asset Turnover Ratio** = Net RevenueFixed Assets\frac{\text{Net Revenue}}{\text{Fixed Assets}}
9. **Gross Profit Ratio** = Gross ProfitNet Revenue×100\frac{\text{Gross Profit}}{\text{Net Revenue}} \times 100
10. **Net Profit Ratio** = Net ProfitNet Revenue×100\frac{\text{Net Profit}}{\text{Net Revenue}} \times 100

Data from Balance Sheet and Profit and Loss Statement (2023):

Balance Sheet 2023:

- **Current Assets**: ₹27,935.24 lakhs
- **Current Liabilities**: ₹22,798.96 lakhs
- **Inventory**: ₹18,464.17 lakhs
- **Cash and Cash Equivalents**: ₹3,423.55 lakhs
- **Trade Receivables**: ₹3,563.89 lakhs
- **Equity**: ₹35,534.51 lakhs
- **Non-Current Liabilities**: ₹5,454.07 lakhs

- **Total Assets**: ₹63,978.34 lakhs
- **Fixed Assets**: ₹27,988.86 lakhs

Profit and Loss Statement 2023:

- **Net Revenue (Total Income)**: ₹1,21,652.29 lakhs
- **COGS**: ₹74,336.86 lakhs (calculated from materials consumed + stock-in-trade + inventory changes)
- **Gross Profit**: ₹47,315.43 lakhs
- **Net Profit After Tax**: ₹10,283.91 lakhs
- **Opening Inventory (2022)**: ₹15,112.75 lakhs
- **Closing Inventory (2023)**: ₹18,464.17 lakhs

Using these values and 2024's data, I'll calculate the ratios for both years and compare them.

Financial Ratios for 2024 and 2023 with Analysis:

1. Current Ratio

- **Formula**: Current Ratio=Current AssetsCurrent Liabilities\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}
- **2024**: 2.99
- **2023**: 1.23
  Inference: The current ratio improved significantly, indicating the company's enhanced ability to meet short-term obligations.

2. Liquid Ratio (Quick Ratio)

- **Formula**: Liquid Ratio=Current Assets−InventoryCurrent Liabilities\text{Liquid Ratio} = \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}
- **2024**: 1.90
- **2023**: 0.42
  Inference: The liquid ratio in 2024 is much stronger, showing improved liquidity after excluding inventory.

3. Debt-Equity Ratio

- **Formula**: Debt-Equity Ratio=Total LiabilitiesEquity\text{Debt-Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Equity}}
- **2024**: 0.41
- **2023**: 0.80
  Inference: The company reduced its reliance on debt in 2024, showing a healthier capital structure.

4. Total Asset to Debt Ratio

- **Formula**: Total Asset to Debt Ratio=Total AssetsTotal Liabilities\text{Total Asset to Debt Ratio} = \frac{\text{Total Assets}}{\text{Total Liabilities}}
- **2024**: 3.42
- **2023**: 2.26
  Inference: A higher ratio in 2024 reflects stronger solvency and better asset coverage of liabilities.

5. Proprietary Ratio

- **Formula**: Proprietary Ratio=EquityTotal Assets\text{Proprietary Ratio} = \frac{\text{Equity}}{\text{Total Assets}}
- **2024**: 0.71 (71%)
- **2023**: 0.56 (56%)
  Inference: The proportion of equity in total assets increased in 2024, indicating a more stable ownership structure.

6. Inventory Turnover Ratio

- **Formula**: Inventory Turnover Ratio=COGSAverage Inventory\text{Inventory Turnover Ratio} = \frac{\text{COGS}}{\text{Average Inventory}}
- **2024**: 4.39
- **2023**: 4.43
  Inference: The inventory turnover ratio remained stable, reflecting consistent efficiency in inventory management.

7. Working Capital Turnover Ratio

- **Formula**: Working Capital Turnover Ratio=Net RevenueWorking Capital\text{Working Capital Turnover Ratio} = \frac{\text{Net Revenue}}{\text{Working Capital}}
- **2024**: 3.77
- **2023**: 23.68
  Inference: The significant decline in 2024 indicates a substantial increase in working capital, reducing turnover efficiency.

8. Fixed Asset Turnover Ratio

- **Formula**: Fixed Asset Turnover Ratio=Net RevenueFixed Assets\text{Fixed Asset Turnover Ratio} = \frac{\text{Net Revenue}}{\text{Fixed Assets}}
- **2024**: 4.06
- **2023**: 4.35
  Inference: The efficiency of fixed asset utilization declined slightly in 2024.

9. Gross Profit Ratio

- **Formula**: Gross Profit Ratio=Gross ProfitNet Revenue×100\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Net Revenue}} \times 100
- **2024**: 41.91%
- **2023**: 38.89%
  Inference: A higher gross profit ratio in 2024 indicates improved profitability before operating expenses.

10. Net Profit Ratio

- **Formula**: Net Profit Ratio=Net ProfitNet Revenue×100\text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Net Revenue}} \times 100
- **2024**: 10.22%
- **2023**: 8.45%
  Inference: The net profit ratio improved in 2024, showing better overall profitability after all expenses.

Conclusion

The financial analysis of DOMS Industries for the years 2024 and 2023 highlights significant improvements in its overall financial health. Key liquidity ratios, such as the current and liquid ratios, improved significantly in 2024, indicating the company's enhanced ability to meet short-term obligations. This reflects better management of assets and liabilities. The proprietary ratio also increased from 56% in 2023 to 71% in 2024, signifying greater reliance on equity and reduced dependence on debt. The debt-equity ratio dropped from 0.80 to 0.41, showcasing improved financial stability and reduced risk for investors.

Profitability ratios, including the gross profit and net profit ratios, show notable growth, with gross profit rising to 41.91% and net profit to 10.22% in 2024. This indicates effective cost control and increased overall profitability. The inventory turnover ratio remained stable, reflecting consistent efficiency in managing stock levels. However, the working capital turnover ratio dropped due to increased working capital, which might require further efficiency adjustments. Additionally, fixed asset utilization showed a minor decline, suggesting scope for better leveraging of resources.

In summary, the company demonstrated robust improvements in liquidity, solvency, and profitability while maintaining operational stability. With continued focus on asset utilization, DOMS Industries is well-positioned for sustained growth.