Stock market project

df['Buy'] = (

(df['ROCE'] > 10) &

(df['ROE'] > 8) &

(df['ROA'] > 3) &

(df['PE'] > 0) & (df['PE'] < 100) &

(df['PB'] > 0.1) & (df['PB'] < 20) &

(df['Debt\_to\_Equity'] < 3) &

(df['Interest\_Coverage'] > 2) &

(df['Operating\_Cash\_Flow'] > 0) &

(df['Free\_Cash\_Flow'] > 0) &

(df['CAGR\_5Y'] >= 12)

).astype(int)

<https://chat.deepseek.com/a/chat/s/bd436e08-2097-49a5-862b-edb27ac5cd9d>

<https://chat.deepseek.com/a/chat/s/bd436e08-2097-49a5-862b-edb27ac5cd9d>

//tingo with add-on 39 dollors

//fmp 49

Gross Margin, Operating Margin, Net Profit Margin, Return on Assets (ROA), Return on Equity (ROE), Return on Capital Employed (ROCE), Price-to-Earnings (P/E), Forward P/E, Price-to-Book (P/B), Price-to-Sales (P/S), Price-to-Cash-Flow (P/CF), Enterprise Value/EBITDA (EV/EBITDA), Current Ratio, Quick Ratio, Cash Ratio, Debt-to-Equity (D/E), Interest Coverage, Debt-to-EBITDA, Asset Turnover, Inventory Turnover, Receivables Turnover, Revenue Growth (YoY), EPS Growth, EBITDA Growth, Dividend Yield, Payout Ratio, Dividend Coverage

**📌 Profitability Ratios**

* Gross Margin
* Operating Margin
* Net Profit Margin
* Return on Assets (ROA)
* Return on Equity (ROE)
* Return on Capital Employed (ROCE)
* Operating Cash Flow Margin
* Free Cash Flow Margin
* Gross Profit

**📌 Valuation Ratios**

* Price-to-Earnings (P/E)
* Forward P/E
* PEG Ratio
* Price-to-Book (P/B)
* Price-to-Sales (P/S)
* Price-to-Cash-Flow (P/CF)
* Price-to-Free-Cash-Flow (P/FCF)
* Enterprise Value/EBITDA (EV/EBITDA)
* Enterprise Value/EBIT (EV/EBIT)
* EV/Sales
* Market Cap / Revenue
* Shareholder Yield
* Trailing PE

**📌 Liquidity Ratios**

* Current Ratio
* Quick Ratio
* Cash Ratio

**📌 Leverage Ratios**

* Debt-to-Equity (D/E)
* Net Debt-to-Equity
* Interest Coverage Ratio
* Debt-to-EBITDA
* Equity Ratio
* Financial Leverage (Assets / Equity)

**📌 Efficiency Ratios**

* Asset Turnover
* Inventory Turnover
* Receivables Turnover
* Working Capital Turnover
* Days Inventory Outstanding (DIO)
* Days Sales Outstanding (DSO)
* Days Payable Outstanding (DPO)
* Cash Conversion Cycle

**📌 Growth Metrics**

* Revenue Growth (YoY)
* EPS Growth
* EBITDA Growth
* Operating Income Growth
* Free Cash Flow Growth
* 3-Year CAGR (Revenue/EPS/etc.)
* 5-Year CAGR (Revenue/EPS/etc.)

**📌 Dividend Metrics**

* Dividend Yield
* Payout Ratio
* Dividend Coverage Ratio
* Retention Ratio
* Dividend Growth Rate (3-Year, 5-Year)
* Buyback Yield
* Shareholder Yield

**📌 Cash Flow Metrics**

* Operating Cash Flow per Share
* Free Cash Flow per Share

**📌 Per Share Metrics**

* Earnings Per Share (EPS)
* Book Value Per Share (BVPS)
* Tangible Book Value Per Share

**📌 Other Risk & Value Indicators**

* Altman Z-Score
* Piotroski F-Score
* Beta (Volatility Measure)