Since we are not given data such as Volume, Open , High , Low ; I couldn’t use more complex strategies and mathematical models. I used a simple mathematical model based on MACD and RSI.

MACD is Moving Average Convergence Divergence. MACD is calculated by subtracting 26-period EMA from 12 period EMA .

An exponential moving average (EMA) is a type of [moving average](https://www.investopedia.com/terms/m/movingaverage.asp) (MA) that places a greater weight and significance on the most recent data points. A nine-day EMA of the MACD called the signal line, is plotted on top of the MACD line, which can function as a trigger for buy and sell signals. The speed at which MACD line crosses the signal line can also tell about the strength of trend.

The relative strength index (RSI) is a [momentum indicator](https://www.investopedia.com/investing/momentum-and-relative-strength-index/) used in technical analysis that measures the magnitude of recent price changes to evaluate overbought or oversold conditions in the price of a stock or other asset. The RSI is displayed as an oscillator (a line graph that moves between two extremes) and can have a reading from 0 to 100.

RSI = 100 – [100/ ( 1+ (Average Gain/ Average Loss)) ]

The average Gain and Loss are generally taken for the interval of 14 days but I have taken them for 19 days due to better results on backtracking.

Traditionally the strategy used is of the kind that RSI>70 indicates overbought or overvalued stock whereas RSI<30 indicates oversold or undervalued condition of the stock.

I have used the strategy that if RSI > 55, then it will indicate a bullish market and hence we should buy the stock if RSI value also agrees with MACD value. If MACD value has just cut the signal line from below, it is a good time to buy and if it has cut from above, it is a good time to square off.

I have also seen that if Current price > Moving average of 200 days and RSI value < 30, then it indicates oversold stock and we should buy. So I have also bought the stock at that position.

Hence this way I have used RSI combined with MACD for my strategy.