# 📑 Report – Live NIFTY/BANKNIFTY Signal App

## 🎯 Purpose of the App

- Real-time NIFTY / BANKNIFTY data fetch karna (SmartAPI se).

- Trading indicators calculate karna (EMA, RSI, MACD).

- Signal generate karna: BUY / SELL / HOLD.

- Profit/Loss calculation with Trailing Stop Loss.

- Alerts bhejna via Telegram bot.

- Charts show karna using Streamlit (price, volume, RSI).

## ⚙️ Features Implemented

- Auto Refresh – App har 10 seconds me refresh hota hai.

- Symbol Selection – User NIFTY ya BANKNIFTY select kar sakta hai.

- SmartAPI Login – OTP (TOTP) based authentication use kiya gaya hai.

- Data Fetching – Previous 1 day se ab tak ka candle data fetch hota hai.

- Indicators – EMA20, EMA50, RSI(14), MACD(12,26,9), Volume Spike Detection.

- Signal Logic – BUY / SELL / HOLD conditions.

- Trailing Stop Loss (TSL) – Entry price ke basis par TSL lagta hai.

- Profit/Loss Display – Entry aur last close ke basis par.

- Charts – EMA, RSI, Volume charts Streamlit me.

- Telegram Alerts – Button click se signal bheja jaata hai.

## 🐞 Issues Found

- SmartAPI Symbol Problem – getCandleData directly 'NIFTY'/'BANKNIFTY' se kaam nahi karta, symboltoken chahiye.

- DataFrame Creation – Candle data raw list deta hai, DataFrame banate waqt error aa sakta hai.

- Session State Handling – entry\_price initialize nahi hota, KeyError aa sakta hai.

- Trailing Stop Loss – Variable define hai (0.5%) but code me 1% fix hai.

- Telegram Alert – GET request me special characters issue, POST use karna chahiye.

## ✅ Recommendations

- Use Symbol Token from SmartAPI instead of raw 'NIFTY'.

- Fix DataFrame Columns properly.

- Initialize Session State for entry\_price.

- Use Defined Trailing Stop Loss Variable.

- Improve UI with st.metric and color-coded signals.

- Use POST request for Telegram Alerts.