Introduction

This project implements a Python-based trading bot that allows automated placement of Market, Limit, and Advanced orders on the Binance USDT-M Futures Testnet. The bot operates through simple CLI scripts and demonstrates secure API management, modular code design, and multiple order strategies.

Objectives

Place Market and Limit orders using the Binance Testnet

Store sensitive API credentials securely via .env

Implement logging and CLI-friendly execution

Extend functionality with advanced order types:

Simulated OCO (TP + SL)

TWAP Execution (Time-Weighted Average Price)

Grid Orders (spread-based)

Technologies Used

Python 3.8+

python-binance (Binance API SDK)

python-dotenv (for .env management)

PyCharm (IDE)

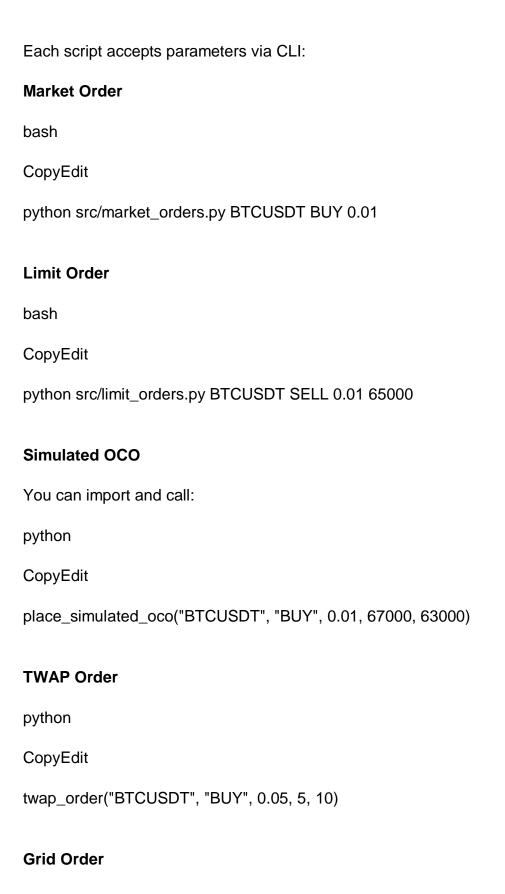
Binance Futures Testnet

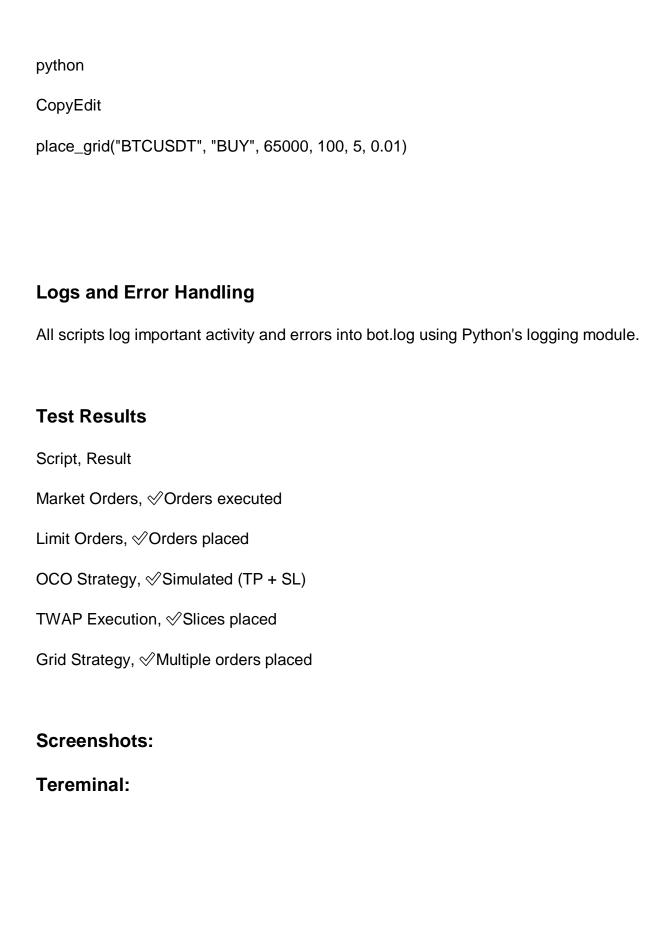
Project Folder Structure

bash

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How It Works





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Terminal Local × + > : -

② vorder 5/5 placed (.venv) PS C:\Users\LENOVO\Downloads\sudhanshu_binance_bot> (.venv) PS C:\Users\LENOVO\Downloads\sudhanshu_binance_bot> python src/advanced/grid_orders.py BTCUSDT BUY 65000 100 3 0.01

② (venv) PS C:\Users\LENOVO\Downloads\sudhanshu_binance_bot> (venv) PS C:\Users\LENOVO\Downloads\sudhanshu_binance_bot> (venv) PS C:\Users\LENOVO\Downloads\sudhanshu_binance_bot> python src/market_orders.py BTCUSDT BUY 0.01

③ Market order placed: BUY 0.01 BTCUSDT
(.venv) PS C:\Users\LENOVO\Downloads\sudhanshu_binance_bot> python src/market_orders.py BTCUSDT SELL 0.01 65000

② Limit order placed: SELL 0.01 BTCUSDT @ 65000.0

② (.venv) PS C:\Users\LENOVO\Downloads\sudhanshu_binance_bot>
```

Bot log:

Binance Order History:

