

# Project Report

```
zeus@3447:~/Projects/trading_bot_cli$ python3 -m src.main market BTC 1 buy
Placing buy MARKET order for 1.0 of BTC
zeus@3447:~/Projects/trading_bot_cli$ python3 -m src.main limit ETH 2 2300 sell
Placing sell LIMIT order for 2.0 of ETH at 2300.0
zeus@3447:~/Projects/trading_bot_cli$
```

Command: `python3 -m src.main market BTC 1 buy`

Explanation: Instantly buys 1 BTC at market price.

Command: `python3 -m src.main limit ETH 2 2300 sell`

Explanation: Places a sell order to sell 2 ETH only if price reaches 2300.

```
zeus@3447:~/Projects/trading_bot_cli$ python3 -m src.main stop-limit XRP 100 210 220 buy
STOP-LIMIT: Trigger at 210.0, then place buy LIMIT at 220.0
zeus@3447:~/Projects/trading_bot_cli$ python3 -m src.main oco ETH 1 1800 1700 buy
OCO: Place buy TAKE-PROFIT at 1800.0 and STOP-LOSS at 1700.0
zeus@3447:~/Projects/trading_bot_cli$ python3 -m src.main twap BTC 1 3 5 sell
TWAP: Executing sell 0.2 of BTC [Slice 1/5]
TWAP: Executing sell 0.2 of BTC [Slice 2/5]
TWAP: Executing sell 0.2 of BTC [Slice 3/5]
TWAP: Executing sell 0.2 of BTC [Slice 4/5]
TWAP: Executing sell 0.2 of BTC [Slice 5/5]
zeus@3447:~/Projects/trading_bot_cli$ python3 -m src.main grid ETH 10 2000 2500 5 buy
GRID [1/5]: Place buy LIMIT order at 2000.0 for 2.0
GRID [2/5]: Place buy LIMIT order at 2125.0 for 2.0
GRID [3/5]: Place buy LIMIT order at 2250.0 for 2.0
GRID [4/5]: Place buy LIMIT order at 2375.0 for 2.0
GRID [5/5]: Place buy LIMIT order at 2500.0 for 2.0
zeus@3447:~/Projects/trading_bot_cli$ ls
bot.log README.md report.pdf src
zeus@3447:~/Projects/trading_bot_cli$ cat bot.log
2025-07-27 14:40:30,886 [INFO] {'type': 'market', 'symbol': 'BTC', 'quantity': 1.0, 'side': 'buy', 'price': None, 'extra': {}}
2025-07-27 14:41:38,634 [INFO] {'type': 'limit', 'symbol': 'ETH', 'quantity': 2.0, 'side': 'sell', 'price': 2300.0, 'extra': {}}
2025-07-27 14:44:08,693 [INFO] {'type': 'stop-limit', 'symbol': 'XRP', 'quantity': 100.0, 'side': 'buy', 'price': 220.0, 'extra': {'stop_price': 210.0}}
2025-07-27 14:44:53,309 [INFO] {'type': 'oco', 'symbol': 'ETH', 'quantity': 1.0, 'side': 'buy', 'price': None, 'extra': {'take_profit': 1800.0, 'stop_loss': 1700.0}}
2025-07-27 14:45:22,074 [INFO] {'type': 'twap', 'symbol': 'BTC', 'quantity': 0.2, 'side': 'sell', 'price': None, 'extra': {'interval': 3, 'slice': 1}}
2025-07-27 14:45:25,077 [INFO] {'type': 'twap', 'symbol': 'BTC', 'quantity': 0.2, 'side': 'sell', 'price': None, 'extra': {'interval': 3, 'slice': 2}}
2025-07-27 14:45:28,081 [INFO] {'type': 'twap', 'symbol': 'BTC', 'quantity': 0.2, 'side': 'sell', 'price': None, 'extra': {'interval': 3, 'slice': 3}}
2025-07-27 14:45:31,085 [INFO] {'type': 'twap', 'symbol': 'BTC', 'quantity': 0.2, 'side': 'sell', 'price': None, 'extra': {'interval': 3, 'slice': 4}}
2025-07-27 14:45:34,088 [INFO] {'type': 'twap', 'symbol': 'BTC', 'quantity': 0.2, 'side': 'sell', 'price': None, 'extra': {'interval': 3, 'slice': 5}}
2025-07-27 14:46:02,643 [INFO] {'type': 'grid', 'symbol': 'ETH', 'quantity': 2.0, 'side': 'buy', 'price': 2000.0, 'extra': {'grid_index': 1}}
2025-07-27 14:46:02,643 [INFO] {'type': 'grid', 'symbol': 'ETH', 'quantity': 2.0, 'side': 'buy', 'price': 2125.0, 'extra': {'grid_index': 2}}
2025-07-27 14:46:02,643 [INFO] {'type': 'grid', 'symbol': 'ETH', 'quantity': 2.0, 'side': 'buy', 'price': 2250.0, 'extra': {'grid_index': 3}}
2025-07-27 14:46:02,643 [INFO] {'type': 'grid', 'symbol': 'ETH', 'quantity': 2.0, 'side': 'buy', 'price': 2375.0, 'extra': {'grid_index': 4}}
2025-07-27 14:46:02,643 [INFO] {'type': 'grid', 'symbol': 'ETH', 'quantity': 2.0, 'side': 'buy', 'price': 2500.0, 'extra': {'grid_index': 5}}
```

Command: `python3 -m src.main stop-limit XRP 100 210 220`  
buy

Explanation: If price hits 210, trigger a limit buy order at 220 for 100 XRP.

Command: `python3 -m src.main oco ETH 1 1800 1700 buy`

Explanation: It Sets the following:

1. Take-profit at 1800

2. Stop-loss at 1700

Whichever triggers first, the other is canceled.

Command: `python3 -m src.main twap BTC 1 3 5 sell`

Explanation: Sell 1 BTC in 5 equal parts every 3 seconds

Command: `python3 -m src.main grid ETH 10 2000 2500 5`  
buy

Explanation: Places 5 limit buy orders between ₹2000 and ₹2500 evenly, each order for 2 ETH (10/5)