FBA Quant

QD Session

FastAPI HW1

Please create APIs that correspond to the following specification using FastAPI, deploy it locally, and upload both the code and the images of the test results to GitHub.

1. Get Tickers

Endpoint	`/api/v1/tickers`
Method	GET
Description	Retrieves a list of all available cryptocurrency tickers and their names in the market.
Response Example	```[{ "ticker": "BTC", "name": "Bitcoin" }, { "ticker": "ETH", "name": "Ethereum" }, { "ticker": "XRP", "name": "Ripple" }, { "ticker": "LTC", "name": "Litecoin" }, ...]```

2. Current Price of a Specific Cryptocurrency

Endpoint	/api/v1/{ticker}/price
Method	GET
Description	Retrieves the current price of the specified ticker.
| Response Example | ```json
{
    "currency": "USD",
    "ticker": "{ticker}",
    "price": 3000.00
}
``` |

3. OHLCV Data for a Specific Date

Endpoint	/api/v1/{ticker}/ohlcv/{date}
Method	GET
Description	Retrieves OHLCV data for the specified ticker on a specific date.
| Response Example | ```json
{
    "date": "2024-03-10",
    "open": 3000.00,
    "high": 3150.00,
    "low": 2950.00,
    "close": 3100.00,
    "volume": 1500,
    "ticker": "{ticker}"
}
``` |

4. OHLCV Data over a Given Period

Endpoint	/api/v1/{ticker}/ohlcv
Method	GET

Query Param	`start_date`: Start date for the query (`YYYY-MM-DD` format) `end_date`: End date for the query (`YYYY-MM-DD` format)
Description	Retrieves OHLCV (Open, High, Low, Close, Volume) data for the specified ticker over a given period

Response Example	```
	[
	    {
	        "date": "2024-03-09",
	        "open": 2900.00,
	        "high": 3100.00,
	        "low": 2850.00,
	        "close": 3000.00,
	        "volume": 1200,
	        "ticker": "{ticker}"
	    },
	    {
	        "date": "2024-03-10",
	        "open": 3000.00,
	        "high": 3150.00,
	        "low": 2950.00,
	        "close": 3100.00,
	        "volume": 1500,
	        "ticker": "{ticker}"
	    }
	]
	``