```
import requests
import json
class StockPortfolioTracker:
  def __init__(self, api_key):
     self.api_key = api_key
     self.portfolio = {}
  def add stock(self, symbol, quantity):
     if symbol in self.portfolio:
       self.portfolio[symbol]['quantity'] += quantity
     else:
       self.portfolio[symbol] = {'quantity': quantity, 'avg_price': 0.0}
  def remove_stock(self, symbol, quantity):
     if symbol in self.portfolio:
       if quantity >= self.portfolio[symbol]['quantity']:
          del self.portfolio[symbol]
       else:
          self.portfolio[symbol]['quantity'] -= quantity
  def update_portfolio(self):
     total value = 0.0
     for symbol, stock_info in self.portfolio.items():
       response = self.get_stock_data(symbol)
       if 'Global Quote' in response:
          price = float(response['Global Quote']['05. price'])
          stock_info['avg_price'] = price
          total_value += price * stock_info['quantity']
     return total_value
  def get_stock_data(self, symbol):
     url =
f'https://www.alphavantage.co/query?function=GLOBAL_QUOTE&symbol}&apikey={se
lf.api_key}'
     response = requests.get(url)
     data = response.json()
     return data
  def display portfolio(self):
     print("\nStock Portfolio:")
     print("Symbol\tQuantity\tAverage Price")
     for symbol, stock_info in self.portfolio.items():
       print(f"{symbol}\t{stock_info['quantity']}\t\t${stock_info['avg_price']:.2f}")
```

```
# Replace 'YOUR_ALPHA_VANTAGE_API_KEY' with your actual API key api_key = 'TO6N2XDUU8Y37G11' tracker = StockPortfolioTracker(api_key)

# Example usage: tracker.add_stock('AAPL', 5) tracker.add_stock('GOOGL', 2)

tracker.display_portfolio()

tracker.update_portfolio()

portfolio_value = tracker.update_portfolio_value:.2f}")

tracker.remove_stock('AAPL', 2)

tracker.display_portfolio()

portfolio_value = tracker.update_portfolio()

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```