



Backend Development- Week5

Week 5

▼ CP Question-

Question- Stock Buy And Sell

You are given an array of prices where `prices[i]` is the price of a given stock on an `i`th day.

You want to maximize your profit by choosing a single day to buy one stock and choosing a different day in the future to sell that stock. Return *the maximum profit you can achieve from this transaction*. If you cannot achieve any profit, return 0.

Examples:

Example 1: Input: prices = [7,1,5,3,6,4]

Output: 5

Explanation: Buy on day 2 (price = 1) and sell on day 5 (price = 6), profit = $6 - 1 = 5$.

Note: Buying on day 2 and selling on day 1 is not allowed because you must buy before you sell.

Example 2: Input: prices = [7,6,4,3,1]

Output: 0

Explanation: In this case, no transactions are done and the max profit = 0.

▼ Coding Challenge-

- Implement a basic text editor with features to open, edit, and save text files.
- Design a basic password manager that stores, retrieves, and generates secure passwords.
- Create a system that predicts equipment failures using sensor data and machine learning algorithms.