#include <bits/stdc++.h>

using namespace std;

int maxProfit(int price[], int start, int end)

{

if (end <= start)

return 0;

int profit = 0;

for (int i = start; i < end; i++) {

for (int j = i + 1; j <= end; j++) {

if (price[j] > price[i]) {

int curr\_profit = price[j] - price[i]

+ maxProfit(price, start, i - 1)

+ maxProfit(price, j + 1, end);

profit = max(profit, curr\_profit);

}

}

}

return profit;

}

int main()

{

int price[] = { 7,1, 5,3,

6, 4 };

int n = sizeof(price) / sizeof(price[0]);

cout << maxProfit(price, 0, n - 1);

return 0;

}