

# Minimum sum of product of two arrays

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#include <bits/stdc++.h>
using namespace std;
int minproduct(int a[], int b[], int n, int k) {
    int diff = 0, res = 0;
    int temp;
    for (int i = 0; i < n; i++) {
        int pro = a[i] * b[i];
        res = res + pro;
        if (pro < 0 && b[i] < 0)
            temp = (a[i] + 2 * k) * b[i];
        else if (pro < 0 && a[i] < 0)
            temp = (a[i] - 2 * k) * b[i];
        else if (pro > 0 && a[i] < 0)
            temp = (a[i] + 2 * k) * b[i];
        else if (pro > 0 && a[i] > 0)
            temp = (a[i] - 2 * k) * b[i];
        int d = abs(pro - temp);
        printf("d = %d, pro = %d, temp = %d\n", d, pro, temp);
        if (d > diff)
            diff = d;
    }
    return res - diff;}
int main() {
    int a[] = {1, 2, -3};
    int b[] = {-2, 3, -5};
    int n = 3, k = 5;
    cout << minproduct(a, b, n, k) << endl;
    return 0;
}
```