Maximum Possible Sum of Products

> 给定两个数组A，B，其中元素两两相乘，并将这些乘积相加，求最大的和

```
#include <bits/stdc++.h>

using namespace std;

typedef vector<int> vi;

long long int maxProductSum(vi &A, vi &B, int &N) {
    long long int maxSum = 0;
    sort(A.begin(), A.end());
    sort(B.begin(), B.end());
    for (int i = 0; i < N; ++i) {
        maxSum += A[i] * B[i];
    }
    return maxSum;
}

int main() {
    int T;
    scanf("%d", &T);
    while (T--) {
        int N;
        scanf("%d", &N);
        vi A(N), B(N);
        for (int i = 0; i < N; ++i) scanf("%d", &A[i]);
        for (int i = 0; i < N; ++i) scanf("%d", &B[i]);
        printf("%lld\n", maxProductSum(A, B, N));
    }
}
```