

```
def sol(n,a):
    t = 0
    for i in range(n - 2):
        j = i + 1
        for k in range(i + 2, n):
            mid = (a[i] + a[k]) / 2
            while (j < (k - 1)) and abs(a[j + 1] - mid) <= abs(a[j] - mid):
                j += 1
            t += (a[i] - a[j]) * (a[j] - a[k])
    return t
for _ in range(int(input())):
    n=int(input())
    a=list(map(int,input().split()))
    print(sol(n,a))
```