## Maximum sum of absolute difference of an array

只需要数组为一小一大交替排放即可

```
#include <bits/stdc++.h>
using namespace std;
int maxAbsDiff(vector<int>& arr, int N) {
    sort(arr.begin(), arr.end());
   vector<int> finalSeq;
   for (int i = 0; i < N / 2; ++i) {
        finalSeq.push_back(arr[i]);
        finalSeq.push_back(arr[N - 1 - i]);
    int maxAbs = 0;
    for (int i = 0; i < N - 1; ++i) {
        maxAbs += abs(finalSeq[i] - finalSeq[i + 1]);
   maxAbs += abs(finalSeq[N - 1] - finalSeq[0]);
   return maxAbs;
}
int main() {
   vector<int> arr = \{1, 2, 4, 8\};
   int N = 4;
   printf("%d\n", maxAbsDiff(arr, N));
   return 0;
}
```