EvenOddArray

Construct an array `b[]` of alternating even and odd integers from an unsorted array `a[]` of length `len` without changing the relative order of the even or odd numbers as they appear in `a[]`. You may assume that the array `b[]` will be the same length as `a[]`.

Start with an even number. If there are more evens than odds, then `b[]` should end with a sequence of even numbers. Likewise, if there are more odds than evens, then `b[]` should end with a sequence of odd numbers.

```
void even_odd(int a[], int b[], int len);
```

Files We Give You: A `makefile` and a sample main program (`evenodd.cpp`) to test your solution. The executable file created by a successful build will be named `evenodd`.

File You Must Submit: Place your solution code in a file named `solution.cpp`. This will be the only file that you submit.

Examples

Input: `a[] = {1, 2}, len = 2`
Output: `b[] = {2, 1}`

Input: `a[] = {1, 2, 3, 4}, len = 4`
Output: `b[] = {2, 1, 4, 3}`

Input: `a[] = {1, 2, 4, 6}, len = 4`
Output: `b[] = {2, 1, 4, 6}`

Input: `a[] = {1}, len = 1`
Output: `b[] = {1}`