#include<iostream>

using namespace std;

void swap(int& x, int& y) {

int temp;

temp = x;

x = y;

y = temp;

return;

}

void Quicksort(int B[], int front, int tail) {

if (front >= tail) { return; };

int x = front;

int y = tail;

int base = B[front];

for (; x < y;) {

for (; B[y] >= base && y > x; ) {

y--;

}

B[x] = B[y];

for (; B[x] <= base && y > x;) {

x++;

}

B[y] = B[x];

}

B[x] = base;

Quicksort(B, front, x - 1);

Quicksort(B, y + 1, tail);

}

int main() {

int A[13]= { 12,61,5,30,12,4,12,60,61,-30,-12,-5,-61 };

int start = 0;

int end = 12;

while (start != end) {

if (A[start] % 2 == 0 && A[end] % 2 != 0) {

swap(A[start], A[end]);

start++;

end--;

}

if (A[start] % 2 == 0 && A[end] % 2 == 0) {

end--;

}

if (A[start] % 2 != 0 && A[end] % 2 != 0) {

start++;

}

if (A[start] % 2 != 0 && A[end] % 2 == 0) {

start++;

end--;

}

}

if (A[start] % 2 != 0) {

Quicksort(A, 0, start);

Quicksort(A, start + 1, 12);

}

else {

Quicksort(A, 0, start - 1);

Quicksort(A, start, 12);

}

for (int i = 0; i <= 12; i++) {

cout << A[i] << " ";

}

system("pause");

return 0;

}