#include <stdio.h>

#include <stdlib.h>

struct node

{

int data;

struct node \*next;

} \*head, \*temp, \*newnode;

int main()

{

int n, i;

scanf("%d", &n);

head = NULL;

for (i = 0; i < n; i++)

{

newnode = (struct node \*)malloc(sizeof(struct node));

scanf("%d", &newnode->data);

newnode->next = NULL; // Initialize next pointer

if (head == NULL)

{

head = newnode;

temp = newnode; // Update temp to point to the first node

}

else

{

temp->next = newnode;

temp = newnode; // Update temp to point to the new node

}

}

struct node \*prev, \*curr, \*next;

prev = NULL;

curr = head;

next = NULL;

while (curr != NULL)

{

next = curr->next;

curr->next = prev;

prev = curr;

curr = next;

}

head = prev;

temp = head;

while (temp != NULL)

{

if (temp->data % 2 == 0)

{

printf("%d ", temp->data);

}

temp = temp->next;

}

temp = head; // Reset temp to the head for odd numbers

while (temp != NULL)

{

if (temp->data % 2 != 0)

{

printf("%d ", temp->data);

}

temp = temp->next;

}

return 0;

}