

Wave in array:

```
#include <stdio.h>
```

```
int main() {
```

```
    int n;
```

```
    printf("Enter the number of elements: ");
```

```
    scanf("%d", &n);
```

```
    int arr[n];
```

```
    printf("Enter %d integers:\n", n);
```

```
    for (int i = 0; i < n; i++) {
```

```
        scanf("%d", &arr[i]);
```

```
    }
```

```
    for (int i = 0; i < n - 1; i++) {
```

```
        for (int j = 0; j < n - i - 1; j++) {
```

```
            if (arr[j] > arr[j + 1]) {
```

```
                int temp = arr[j];
```

```
                arr[j] = arr[j + 1];
```

```
                arr[j + 1] = temp;
```

```
            }
```

```
        }
```

```
    }
```

```
    for (int i = 0; i < n - 1; i += 2) {
```

```
        int temp = arr[i];
```

```
        arr[i] = arr[i + 1];
```

```
        arr[i + 1] = temp;
```

```
    }
```

```
    for (int i = 0; i < n; i++) {
```

```
        printf("%d ", arr[i]);
```

```
    }
```

```
    printf("\n");
```

```
return 0;
```

```
}
```