

Sort an array in wave form

```
#include<stdio.h>

int main()
{
    int i,j,n,temp;
    scanf("%d",&n);
    int arr[n];
    for(i=0; i<n; i++)
    {
        scanf("%d",&arr[i]);
    }
    for(i=0; i<n-1; i++)
    {
        if(i%2==0)
        {
            if(arr[i]<arr[i+1])
            {
                temp=arr[i];
                arr[i]=arr[i+1];
                arr[i+1]=temp;
            }
        }
        else if(i%2 !=0)
        {
            if(arr[i]>arr[i+1])
            {
                temp=arr[i];
```

```
        arr[i]=arr[i+1];
        arr[i+1]=temp;
    }
}
}
printf("Sorted array in wave form: \n");
for(i=0;i<n;i++)
{
    printf("%d ",arr[i]);
}
printf("\n");
}
```