

**Write a recursive function to sort a given list of numbers. Write a main function to test the same.**

```
void sort(int list[], int n){
    int i, tmp, min;
    if (n == 1) //base case
        return;
    /* find index of smallest no */
    min = 0;
    for(i = 1; i < n; i++)
        if (list[i] < list[min])
            min = i;
    /* move smallest element to 0-th element */
    tmp = list[0];
    list[0] = list[min];
    list[min] = tmp;
    /* recursion */
    sort(&list[1], n);
}

void main(){
    int a[100], n;
    cout<<"Enter no. Of elements : ";
    cin>>n;
    cout<<"Enter the elements : ";
    for(int i=0;i<n;i++)
        cin>>a[i];
    //sort using recursion
    Sort(list,n);
}
```

```
cout<<"Sorted list : ";  
for(int i=0;i<n;i++)  
    cout<<a[i]<<" ";
```

```
}
```