

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

```
struct pair{  
    int min;  
    int max;  
};
```

```
struct pair getMinMax(int arr[], int low, int high) {
```

```
    struct pair minmax;
```

```
    if (low == high){  
        minmax.max = arr[low];  
        minmax.min = arr[low];  
        return minmax;  
    }
```

```
    if (high == low + 1){  
        if (arr[low] > arr[high]){  
            minmax.max = arr[low];  
            minmax.min = arr[high];  
        }  
        else{  
            minmax.max = arr[high];  
            minmax.min = arr[low];  
        }  
        return minmax;  
    }
```

```
    struct pair mml, mmr;  
    int mid;
```

```
    mid = (low + high)/2;  
    mml = getMinMax(arr, low, mid);  
    mmr = getMinMax(arr, mid+1, high);
```

```
    if (mml.min < mmr.min)  
        minmax.min = mml.min;  
    else  
        minmax.min = mmr.min;
```

```
    if (mml.max > mmr.max)  
        minmax.max = mml.max;
```

```

    else
        minmax.max = mmr.max;

    return minmax;
}

int main(){
    int arr_size=0;

    printf("Enter size\n");
    scanf("%d", &arr_size);

    int arr[arr_size];

    printf("Enter elements\n");
    for(int i=0; i<arr_size; i++)
        scanf("%d", &arr[i]);

    struct pair minmax = getMinMax(arr, 0, arr_size-1);
    printf("\nMinimum element is %d", minmax.min);
    printf("\nMaximum element is %d", minmax.max);
    return 0;
}
/*OUTPUT

```

```

Enter size
8
Enter elements
20
5
7
25
30
1
9
12

```

```

Minimum element is 1
Maximum element is 30
Process returned 0 (0x0)  execution time : 15.979 s
Press any key to continue.

```

```

*/

```

