

```
#include <stdio.h>

int a[50], n;
int fmax, fmin;

void minmax(int i, int j);

int main() {

    int i;

    printf("Prepared by: Vedant\n");
    printf("Enter the number of elements in the array: ");
    scanf("%d", &n);

    printf("Enter %d elements in the array:\n", n);
    for (i = 0; i < n; i++)

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

    printf("\nThe elements in the array are:\n");
    for (i = 0; i < n; i++)

        printf("%d\n", a[i]);

    // Initialize fmax and fmin with first element
    fmax = fmin = a[0];

    minmax(0, n - 1);
```

```
printf("\nThe minimum element of the list is: %d\n", fmin);  
printf("The maximum element of the list is: %d\n", fmax);
```

```
return 0;  
}
```

```
void minmax(int i, int j) {
```

```
int gmax, gmin, hmax, hmin, mid;
```

```
if (i == j) {
```

```
    // Only one element
```

```
    if (a[i] > fmax) fmax = a[i];
```

```
    if (a[i] < fmin) fmin = a[i];
```

```
    } else if (i == j - 1) {
```

```
        // Two elements
```

```
        if (a[i] > a[j]) {
```

```
            if (a[i] > fmax) fmax = a[i];
```

```
            if (a[j] < fmin) fmin = a[j];
```

```
        } else {
```

```
            if (a[j] > fmax) fmax = a[j];
```

```
            if (a[i] < fmin) fmin = a[i];
```

```
        }
```

```
    } else {
```

```
// More than two elements, divide
```

```
mid = (i + j) / 2;
```

```
minmax(i, mid);
```

```
minmax(mid + 1, j);
```

```
}
```

```
}
```