

linear search

```
1  int search(int a[], int n, int val)
2  {
3
4      int i;
5
6      for (i=0; i<n; i++)
7          {
8              if (a[i]==val)
9                  return i;
10         }
11
12     return -1;
13 }
```

binary search

```
1  int search(int a[], int n, int val)
2  {
3      int mid, low=0, high=n-1;
4
5      while(low<=high)
6      {
7          mid=(low+high)/2;
8          if(a[mid]==val)
9              return mid;
10         else if(val>a[mid])
11             low=mid+1;
12         else
13             high=mid-1;
14     }
15
16     return -1;
17 }
```

largest element

```
1  int search(int a[] ,int n)
2  {
3
4      int i;
5      int best_val=a[0];
6
7      for( i=1;i<n; i++)
8          {
9              if(a[i]>best_val)
10 best_val= a[i];
11          }
12
13      return best_val;
14 }
```