

- Q1) Write a C program to search for a key element using linear search.
- Q2) Write a C program to sort the numbers using ~~select~~ bubble sort.

Q1)  
Soln:

```
#include <stdio.h>
int main()
{
    int a[10], key, i, n;
    printf("Enter the value of n: \n");
    scanf("%d", &n);
    printf("Enter the elements: \n");
    for (i = 0; i < n; i++)
    {
        scanf("%d", &a[i]);
    }
    printf("Enter the key: \n");
    scanf("%d", &key);
    for (i = 0; i < n; i++)
    {
        if (key == a[i])
        {
            printf("key found!");
        }
    }
    return 0;
}
```

Output:

Enter the value of n:

5

Enter the elements:

1 3 4 6 8

Enter the key:

6

key found!



Q2)

```
#include <stdio.h>
void main()
{
    int a[10], i, j, temp, n;
    printf("enter n:\n");
    scanf("%d", &n);
    printf("enter the elements:\n");
    for (i=0; i<n; i++)
    {
        scanf("%d", &a[i]);
    }
    for (i=0; i<n; i++)
    {
        for (j=i+1; j<n; j++)
        {
            if (a[i] > a[j])
            {
                temp = a[i];
                a[i] = a[j];
                a[j] = temp;
            }
        }
    }
    printf("the sorted elements are:\n");
    for (i=0; i<n; i++)
    {
        printf("%d", a[i]);
    }
}
```

Output:

enter n:

5

enter the elements:

1 3 5 2 4

the sorted elements are:

1 2 3 4 5

*[Signature]*  
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