

PALAK SHARMA

73

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int a[20], i, n, key, low, high, mid;
    clrscr();
    printf("Enter the array elements in ascending order");
    for(i = 0; i < n; i++)
    {
        scanf("%d", &a[i]);
    }
    printf("Enter the key element\n");
    scanf("%d", &key);
    low = 0;
    high = n - 1;
    while(high >= low)
    {
        mid = (low + high) / 2;
        if(key == a[mid])
            break;
        else
        {
            if(key > a[mid])
                low = mid + 1;
            else
                high = mid - 1;
        }
    }
    if(key == a[mid])
        printf("The key element is found at location %d", mid + 1);
    else
        printf("the key element is not found");
    getch();
}
```

Enter the size of the array 7

Enter the array elements in ascending order 23 45 68 90 100 789

Enter the key element 789

The key Element is found at location 6

OUTPUT: