//To print Binary search algorithm//

#include <stdio.h>

int main()

{

int i,a[100],n, low, high, mid, x;

printf("Enter number of elements:");

scanf("%d", &n);

printf("Enter %d integers:" , n);

for (i= 0; i< n; i++)

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

printf("Enter value to find:");

scanf("%d", &x);

low = 0;

high = n - 1;

mid = (low+high)/2;

while (low <= high) {

if (a[mid] < x)

low = mid + 1;

else if (a[mid] == x) {

printf("%d found at position %d", x, mid+1);

break;

}

else

high = mid - 1;

mid = (low + high)/2;

}

if (low>high)

printf("The number %d not found in the list", x);

return 0;

}

Output:

Enter size of array: 5

Enter array element: 3, 4, 5, 6, 7

Enter the element to search: 2

Element not found