**Binary search**

#include<stdio.h>

int main()

{

int list[20],first,last,middle,i,n,element;

printf("Enter the size of array:");

scanf("%d",&n);

printf("Enter the elements of array in ascending order:\n");

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

{

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

}

printf("Enter the Element to be searched:");

scanf("%d",&element);

first=0;

last=n-1;

middle=(first+last)/2;

while(first<=last)

{

if(list[middle]<element)

{

first=middle+1;

}

else if(list[middle]>element)

{

last=middle-1;

}

else

{

printf("The element %d is found in the list\n",list[middle]);

break;

}

middle = (first + last)/2;

first++;

}

if(first>last)

printf("Entered element is not in array\n");

return 0;

}

Output:

