BINARY SEARCH

Program:-

#include<stdio.h>

#include<conio.h>

void main()

{

int a[10],i,j,k,m,n,t,c;

clrscr();

printf("\n Enter the total no. of numbers: ");

scanf("%d",&n);

printf("\n Enter the numbers: \n");

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

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

printf("\n Enter the no. to be searched: ");

scanf("%d",&m);

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

{

for(j=(i+1);j<n;j++)

{

if(a[i]>a[j])

{

t=a[j];

a[j]=a[i];

a[i]=t;

}

}

}

k=n/2;

if(a[k]<=m)

{

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

{

if(a[i]==m)

c=1;

}

}

else

{

if(a[k]>m)

{

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

{

if(a[i]==m)

c=1;

}

}

}

printf("\n Sorted numbers:-\n");

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

printf("%d ",a[i]);

if(c==1)

printf("\n The number %d is founded",m);

else

printf("\n The number %d is not found",m);

getch();

}

OUTPUT:-

