**Assignment No:-4.2**

**Assignment Title:-Implementation of Program based on searching techniques using array**

**(Binary Search).**

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#include<iostream.h>

#include<conio.h>

int BINARY\_SEARCH(int\*arr,int ele,int n);

int BINARY\_SEARCH(int\*arr,int ele,int n)

{

int low=1,high=n;

while(low<=high)

{

int mid=(low+high)/2;

if(ele==mid)

return 1;

else if(ele<arr[mid])

high=mid-1;

else if(ele<arr[mid])

low=mid+1;

}

return -1;

}

void main()

{

clrscr();

int n,ele,arr[10];

cout<<"Enter size of an array"<<endl;

cin>>n;

cout<<"Enter element in an array"<<endl;

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

{

cin>>arr[i];

}

cout<<"Enter element to search"<<endl;

cin>>ele;

int res=BINARY\_SEARCH(arr,ele,n);

if(res==-1)

cout<<"Element is not present"<<endl;

else

cont<<"Element is present"<<endl;

getch();

}