BINARY SEARCH

#include<stdio.h>

#include<conio.h>

void main()

{

int a[20],i,item,n,beg,end,pos,mid;

clrscr();

printf("ENTER THE LIMIT OF THE ARRAY:");

scanf("%d",&n);

printf("ENTER THE ELEMENTS(sorted array):");

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

{

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

}

printf("\nARRAY\n");

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

{

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

}

printf("\nENTER THE ELEMENT TO BE SEARCH:");

scanf("%d",&item);

beg=1;

end=n;

pos=-1;

while(beg<=end)

{

mid=(beg+end)/2;

if(a[mid]==item)

{

pos=mid;

printf("%d FOUND AT %d",item,pos);

break;

}

else

{

if(a[mid]>item)

end=mid-1;

else

beg=mid+1;

}

}

if(pos==-1)

printf("VALUE IS NOT PRESENT IN THE ARRAY");

getch();

}



