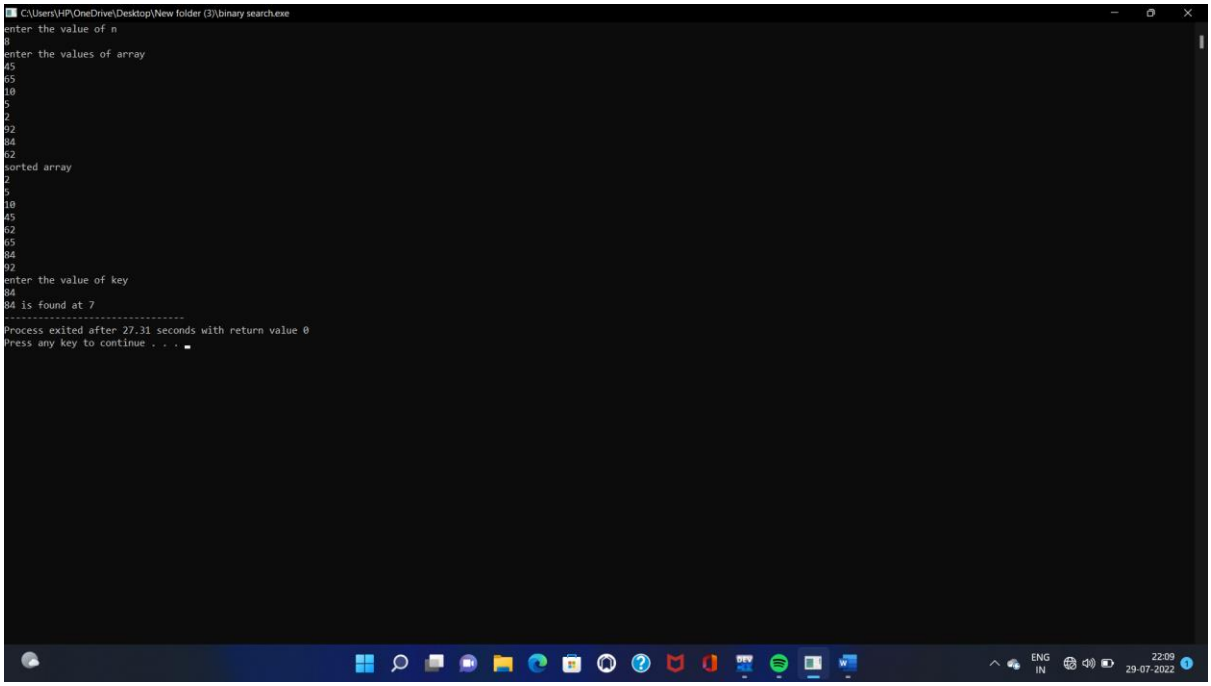
/*array binary search*/

```
#include<stdio.h>
int main()
{
	int n,i,temp,j,last,first,mid,key;
	printf("enter the value of n\n");
	scanf("%d",&n);
	int a[n];
	printf("enter the values of array\n");
	for(i=0;i<n;i++)
	{
		scanf("%d",&a[i]);
	}
	for(i=0;i<n;i++)
	{
		for(j=i+1;j<n;j++)
		{
			if(a[i]>a[j])
			{
			temp=a[i];
			a[i]=a[j];
			a[j]=temp;
		  }
		}
	}
	printf("sorted array\n");
	for(i=0;i<n;i++)
	{
		printf("%d\n",a[i]);
	}
	first=0;
```

```
        last=n-1;
        printf("enter the value of key\n");
        scanf("%d",&key);
        mid=(first+last)/2;
        while(first<=last)
        {
                if(a[mid]<key)
                {
                        first=mid+1;
                }
                else if(a[mid]==key)
                {
                        printf("%d is found at %d",key,mid+1);
                        break;
                }
                else
                {
                        last=mid-1;
                        mid=(first+last)/2;
                }
                mid=(first+last)/2;

        }
        if(first>last)
        {
                printf("value is not found");
        }
        return 0;
}
```


C:\Users\HP\OneDrive\Desktop\New folder (3)\binary search.exe
enter the value of n
8
enter the values of array
45
65
10
5
2
92
84
62
sorted array
2
5
10
45
62
65
84
92
enter the value of key
84
84 is found at 7

Process exited after 27.31 seconds with return value 0
Press any key to continue . . .
ENG
IN
22:09
29-07-2022