

```
#include <stdio.h>

void main()
{
    int i, j, n, mid, low, high, item, found = 0;

    printf("Enter number of elements in the array\n");
    scanf("%d", &n);
    int a[n];

    printf("Enter %d elements in ascending order:\n", n);
    for (i = 0; i < n; i++)
    {
        scanf("%d", &a[i]);
    }

    printf("Enter element you want to search: \n");
    scanf("%d",&item);

    low = 0, high = n-1;

    for(i=0;i<(n+1)/2;i++){
        mid=(low + high)/2;
        if(item == a[mid]){
            printf("Element found at %d position\n",mid+1);
            found = 1;
            break;
        }
    }
}
```

```

    }
    else if(item < a[mid]){
        high = mid - 1;
    }
    else if(item > a[mid]){
        low = mid + 1;
    }
}
if(found != 1){
    printf("Element not found :(\n");
}
}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```

PS D:\Atharv\Desktop\Programming Sem-3> cd "d:\Atharv\Desktop\Programming
f ($?) { .\binarysearch }
Enter number of elements in the array
6
Enter 6 elements in ascending order:
5
8
12
23
45
63
Enter element you want to search:
45
Element found at 5 position
PS D:\Atharv\Desktop\Programming Sem-3\DSA\Practical 3>

```