Binary number:

INPUT:

```
■ File Edit Search Run Compile Debug Project Options
                                                                            Window Help
                                       = ESSAY7.C =
 #include<stdio.h>
 int main()
int c,first,last,middle,n,search,array[100];
printf("Enter number of elements\n");
scanf("%d",&n);
printf("Enter %d integers\n",n);
for (c=0;c<n;c++)
scanf("%d",&array[c]);
printf("Enter value to find\n");
scanf("%d",&search);
first = 0;
last = n-1;
middle = (first+last)/2;
while(first<=last)
if(array[middle]<search)</pre>
first =middle + 1;
else if (array[middle]==search)
printf("%d found at location %d.\n",search,middle+1);
        = 1:1 ====
F1 Help F2 Save F3 Open Alt-F9 Compile F9 Make F10 Menu
```

```
≡ File Edit Search Run Compile Debug Project Options
                                                                Window Help
                                 = essay7.c =
while(first<=last)
if (array[middle] (search)
first =middle + 1;
else if (array[middle]==search)
printf("%d found at location %d.\n",search,middle+1);
break;
else
last=middle-1;
middle=(first + last)/2;
if (first>last)
printf("Not found! %d is not present in the list.\n",search);
return 0;
     = 21:37 -----
F1 Help F2 Save F3 Open Alt-F9 Compile F9 Make F10 Menu
```

OUTPUT:

```
16
18
27
16
23
21
19
Enter value to find
23
Not found! 23 is not present in the list.
Enter number of elements
Enter 7 integers
16
18
19
20
21
23
22
Enter value to find
23
23 found at location 6.
Enter number of elements
```