

Write a C program to search a number using Binary Search method

```
#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]);

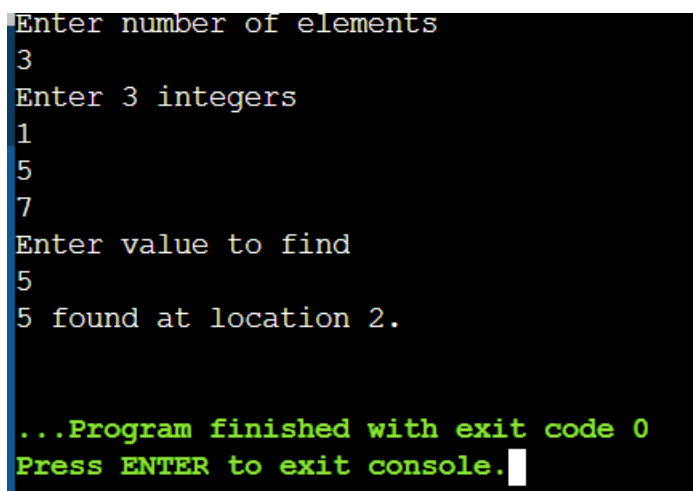
    printf("Enter value to find\n");
    scanf("%d", &search);

    first = 0;
    last = n - 1;
    middle = (first+last)/2;

    while (first <= last) {
        if (array[middle] < search)
            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 isn't present in the list.\n", search);

return 0;
}
```

A screenshot of a terminal window with a black background and green text. The text shows the execution of a program: it prompts for the number of elements (3), then for 3 integers (1, 5, 7), then for a value to find (5), and finally outputs "5 found at location 2.". At the bottom, it states "...Program finished with exit code 0" and "Press ENTER to exit console." with a white cursor block.

```
Enter number of elements
3
Enter 3 integers
1
5
7
Enter value to find
5
5 found at location 2.

...Program finished with exit code 0
Press ENTER to exit console.
```