

# EXPERIMENT 2

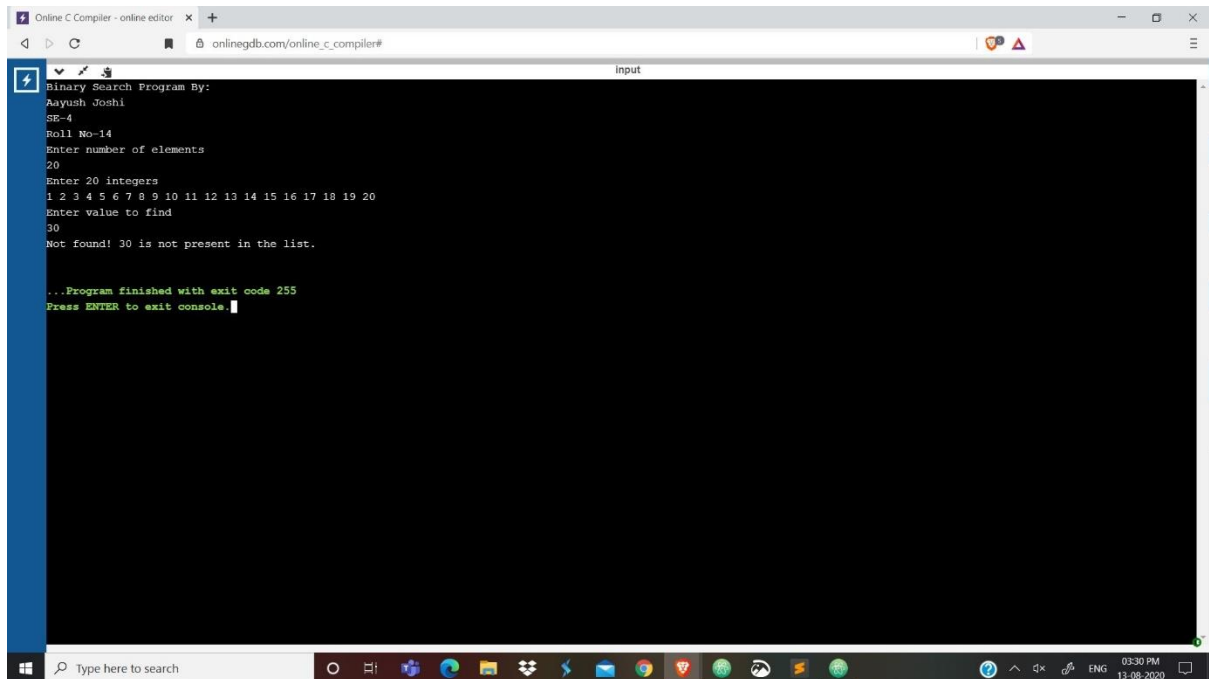
## Binary Search

### Program:

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,n,first,last,middle,search;
    int array[50];
    printf("Binary Search Program By:\nAayush Joshi\nSE-4\nRoll No-14\n");
    printf("Enter number of elements\n");
    scanf("%d",&n);
    printf("Enter %d integers\n",n);
    for(i = 0;i < n;i++)
    {
        scanf("%d",&array[i]);
    }
    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 is not present in the list.\n",search);
}
getch();
}
```

# Output:

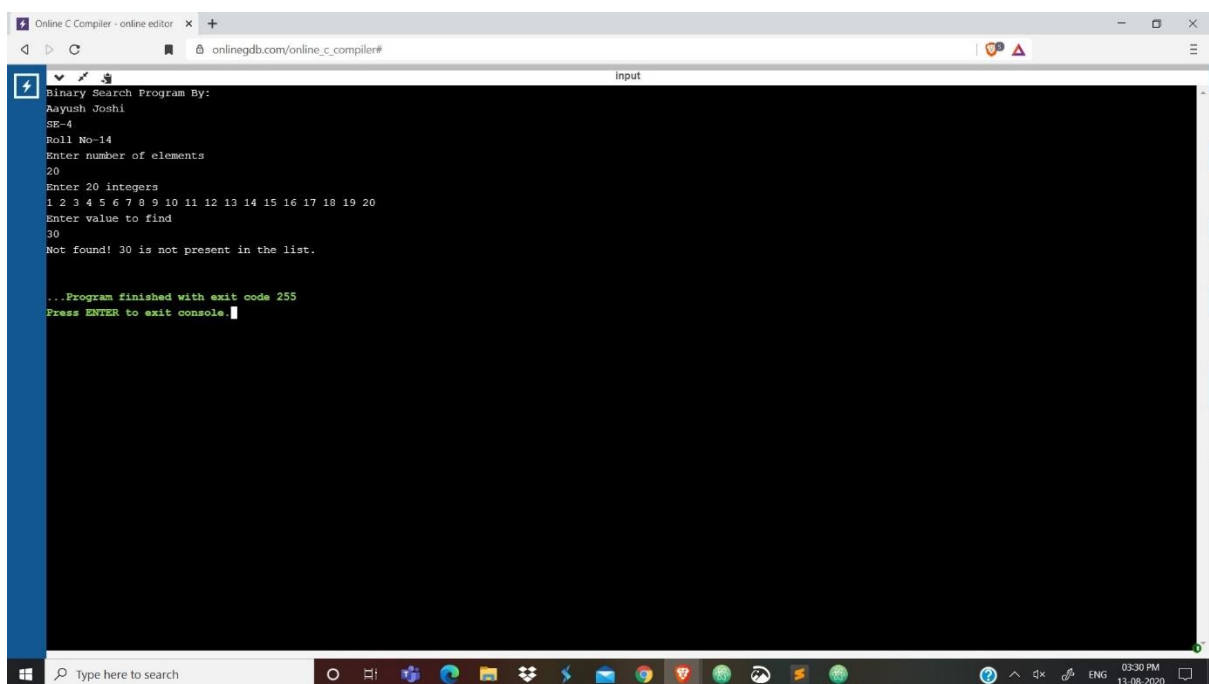


A screenshot of a web browser displaying an online C compiler interface. The browser's address bar shows 'onlinegdb.com/online\_c\_compiler#'. The compiler window has a dark background with a blue sidebar on the left. The main area shows the output of a C program. The program is a binary search algorithm. The output text is as follows:

```
Binary Search Program By:
Aayush Joshi
SE-4
Roll No-14
Enter number of elements
20
Enter 20 integers
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Enter value to find
30
Not found! 30 is not present in the list.

...Program finished with exit code 255
Press ENTER to exit console.
```

The Windows taskbar is visible at the bottom of the browser window, showing the search bar and various application icons. The system clock in the bottom right corner indicates the time is 03:30 PM on 13-08-2020.



This is a duplicate of the screenshot above, showing the same online C compiler interface and program output. The text displayed in the compiler window is identical to the one in the first screenshot.