

Code:-

```
1  #include<stdio.h>
2  void binary_search(int arr[], int size, int key) {
3      int low = 1, high = size, mid;
4      while(low <= high){
5          mid = (low + high) / 2;
6          if(arr[mid] == key) {
7              printf("Element found at index %d\n", mid + 1);
8              return;
9          }else if(arr[mid] < key){
10             low = mid + 1;
11          }else{
12             high = mid - 1;
13          }
14          if(low > high){
15              printf("Element not found\n");
16              return;
17          }
18      }
19 }
20 int main() {
21     int arr[] = {11,22,33,44,55,66,77,88};
22     int key = 33;
23     int size = sizeof(arr)/sizeof(arr[0]);
24     binary_search(arr, size, key);
25
26     return 0;
27 }
```

Output:-

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER 2

admin@DESKTOP-72HUHIM MINGW64 /e/A0A (main)

• \$ gcc binarySearch.c -o binarySearch.c

gcc.exe: fatal error: input file 'binarySearch.c' is the same as output file
compilation terminated.

admin@DESKTOP-72HUHIM MINGW64 /e/A0A (main)

• \$ gcc binarySearch.c -o binarySearch

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• \$./binarySearch.exe

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• \$ █