```c
#include <stdio.h>
  int main()
{
 //Initialize array
 int arr[] = {1, 2, 3, 4, 2, 7, 8, 8, 3};

 //Calculate length of array arr
 int length = sizeof(arr)/sizeof(arr[0]);

 printf("Duplicate elements in given array: \n");
 //Searches for duplicate element
 for(int i = 0; i < length; i++) {
   for(int j = i + 1; j < length; j++) {
     if(arr[i] == arr[j])
       printf("%d\n", arr[j]);
   }
 }
 return 0;
}
```