



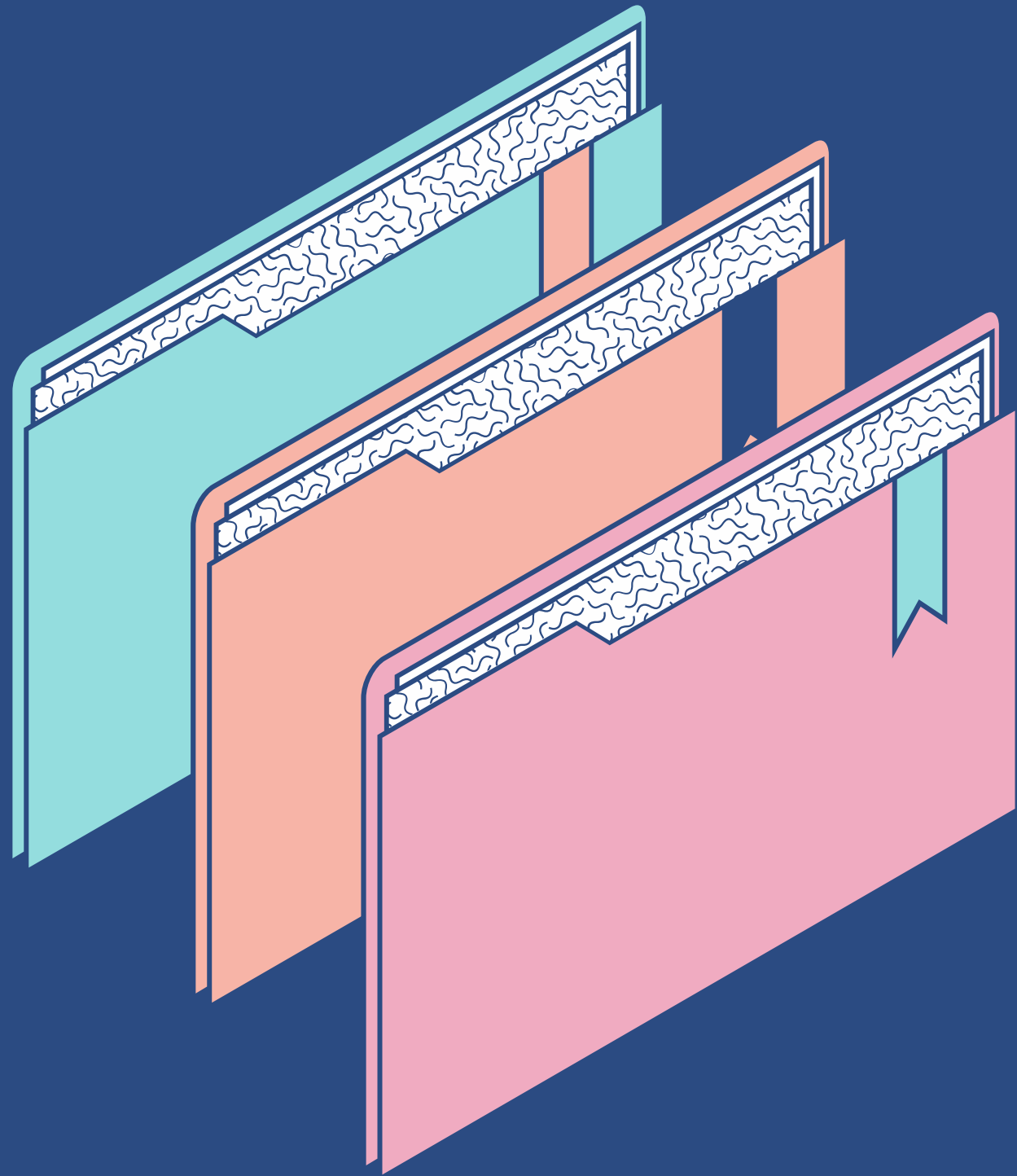
ITP ASSIGNMENT -1

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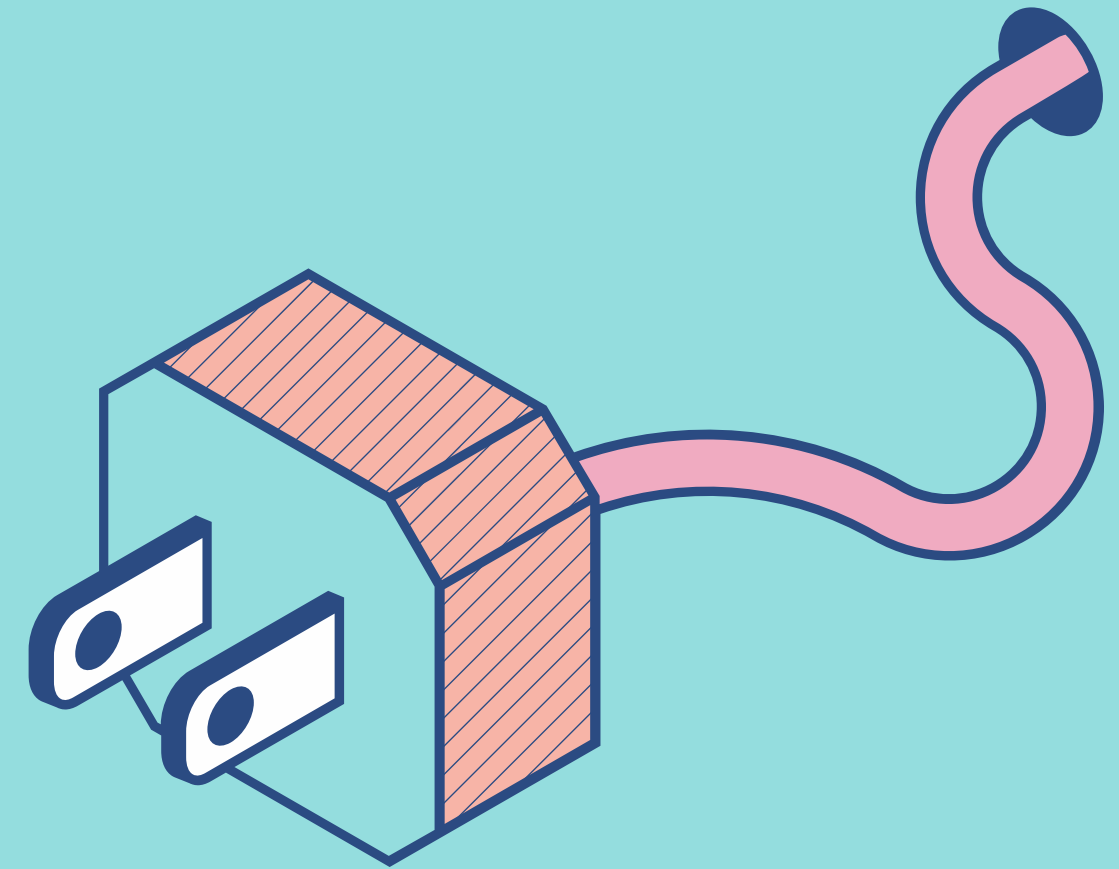
PROBLEM STATEMENT

Write a C program

- To check the number of duplicates elements in an array .
- To delete the duplicate elements from the array.

Techniques used

LOOPS(FOR LOOPS
SPECIFICALLY)
IF STATEMENTS
NESTED FOR LOOPS





STEP 1 : TO COUNT NUMBER OF DUPLICATE ELEMENTS

- To include complete duplicate components in a given cluster we really want three loops. Run an external loop from 0 to estimate.
- This loop is utilized to choose every component of the ARRAY and check next ensuing components for copies of components utilizing one more settled loop.
- Run one more inward loop to see the first copy of the current exhibit component
- Inside the inward loop ,check for a copy component. In the event that a copy component is found, increase copy count. Which is `if(arr[i] == arr[j])` then, at that point, `count++`.

STEP2 :To Remove Duplicate Elements from an Array:

1 ————— 2 ————— 3 ————— 4 ————— 5

**Use for loop
to read the
elements of
an array
and store in
arr[i]
variable.**

**duplicate
element is
encountered**

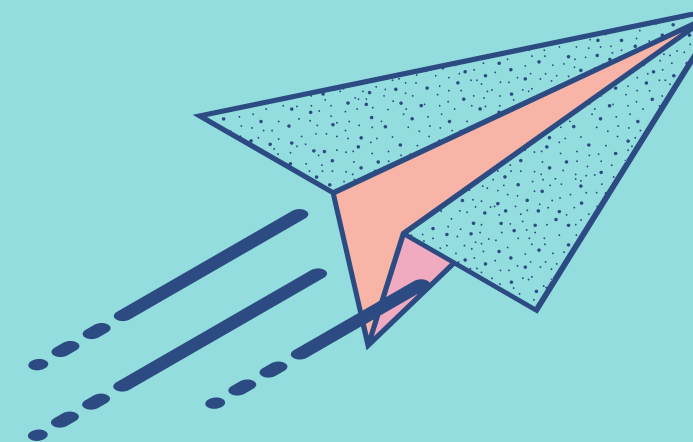
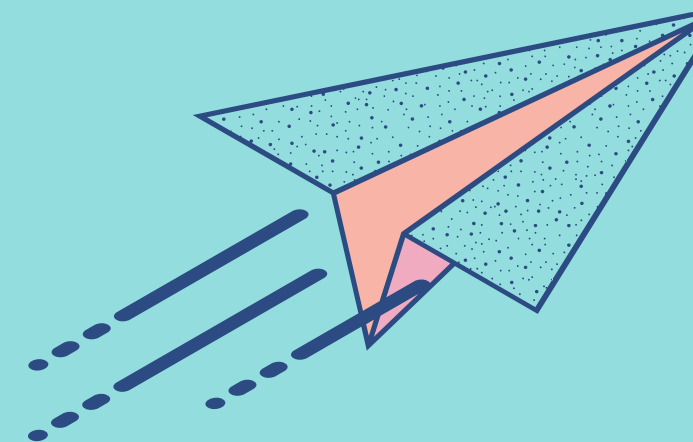
**delete the
duplicate
element
from an
array**

**the size of
array is
decrement by
1 such that,
size = size - 1**

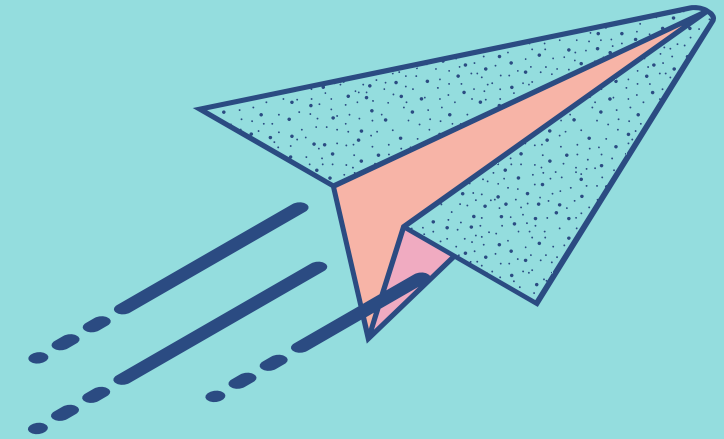
**After that,
print the
unique
elements of
an array**

ALGORITHM

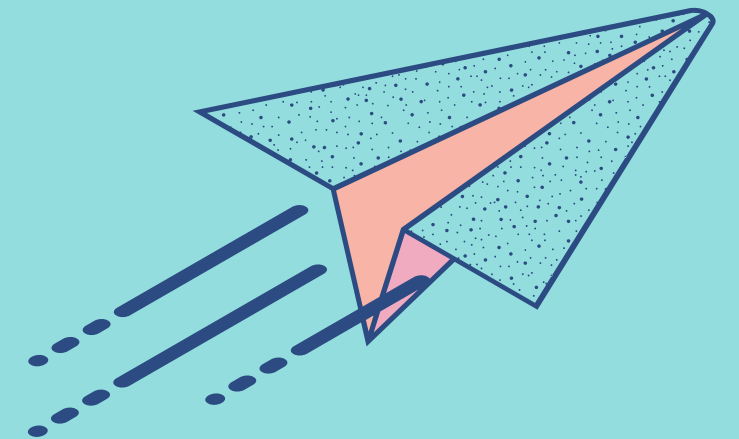
```
for (i = 0; i < SIZE; i++)
{
    scanf("%d", &arr[i]);
}
for (i = 0; i < SIZE; i++)
{
    for (j = i + 1; j < SIZE; j++)
    {
        if (arr[i] == arr[j])
        {
            COUNT++;
            for (k = j; k < SIZE; k++)
            {
                arr[k] = arr[k + 1];
            }
            SIZE--;
            j--;
        }
    }
}
```



CONCLUSION



**HERE , WE HAVE CONCLUDED
WORKING OF A C PROGRAM WHICH
COUNTS THE NUMBER OF
DUPLICATE ELEMENTS IN AN
ARRAY AND DELETE THOSE
DUPLICATE ELEMENTS.**



REFERENCES

<https://www.javatpoint.com/remove-duplicate-elements-from-an-array-in-c>

[C program to delete duplicate elements from array - Codeforwin](#)

