Write Program to remove duplicate elements in an array

Description

Get an array as input from the user and then remove all the duplicate elements in that array.

Input

Enter the size of array

5

Enter the elements of array

35 35 45 60 60

Output

35 45 60

C Program

```c
#include<stdio.h>
int dupRemove(int arr[], int n)
{
  if (n==0 || n==1)
    return n;
  int temp[n];
  int j = 0;
  for(int i=0; i<n-1; i++)
  {
    if (arr[i] != arr[i+1])
      temp[j++] = arr[i];
  }
  temp[j++] = arr[n-1];
  for(int i=0; i<j; i++)
    arr[i] = temp[i];
```
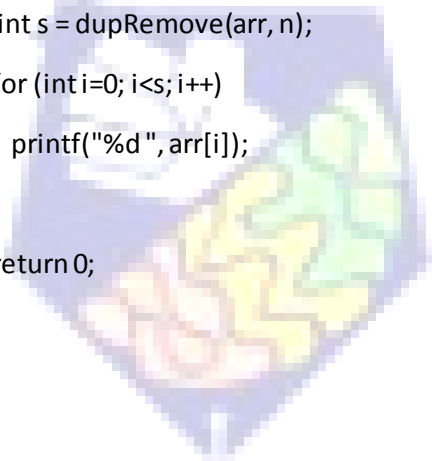
```c
    return j;
}
int main()
{
    int n;
    printf("Enter the size of array: ");
    scanf("%d",&n);
    int arr[n];
    printf("Enter the elements of array: ");
    for(int i=0;i<n;i++)
    scanf("%d",&arr[i]);
    int s = dupRemove(arr, n);
   for (int i=0; i<s; i++)
     printf("%d ", arr[i]);

    return 0;
}
```

C++ Program

```cpp
#include<iostream>
using namespace std;
int dupRemove(int arr[], int n)
{
    if (n==0 || n==1)
        return n;
    int temp[n];
    int j = 0;
    for(int i=0; i<n-1; i++)
    {
        if (arr[i] != arr[i+1])
            temp[j++] = arr[i];
    }
    temp[j++] = arr[n-1];
    for(int i=0; i<j; i++)
        arr[i] = temp[i];
    return j;
}
int main()
{
    int n;
    cout<<"Enter the size of array: ";
    cin>>n;
    int arr[n];
    cout<<"Enter the elements of array: ";
    for(int i=0;i<n;i++)
    cin>>arr[i];
    int s = dupRemove(arr, n);
```

```
  for (int i=0; i<s; i++)
    cout<<arr[i]<<" ";


  return 0;
}
```

Java

```java
import java.util.Scanner;

class Main
{
  static int removeDup(int arr[], int n)
  {
    if (n==0 || n==1)
      return n;
    int j = 0;
    for (int i=0; i<n-1; i++)
      if (arr[i] != arr[i+1])
        arr[j++] = arr[i];
    arr[j++] = arr[n-1];
    return j;
  }
  public static void main (String[] args)
  {
    int n;
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter the size of the array: ");
    n = sc.nextInt();
    int[]arr = new int[n];
    System.out.println("Enter the array elements: ");
    for(int i = 0; i < n; i++)
    {
      arr[i] = sc.nextInt();
    }
    int s = removeDup(arr, n);
    for (int i=0; i<s; i++)
```

```
        System.out.print(arr[i]+" ");
    }
}
```

Python

```python
def removeDup(arr, n):
    if n == 0 or n == 1:
        return n
    temp = list(range(n))
    j = 0;
    for i in range(0, n-1):
        if arr[i] != arr[i+1]:
            temp[j] = arr[i]
            j += 1


    temp[j] = arr[n-1]
    j += 1


    for i in range(0, j):
        arr[i] = temp[i]
    return j

n = int(input("Enter size of array: "))
arr = []
print("Enter array elements: ")
for i in range(0,n):
        temp = int(input())
        arr.append(temp)
n = removeDup(arr, n)
for i in range(n):
    print ("%d"%(arr[i]), end =" ")
```