Remove Duplicates from an array
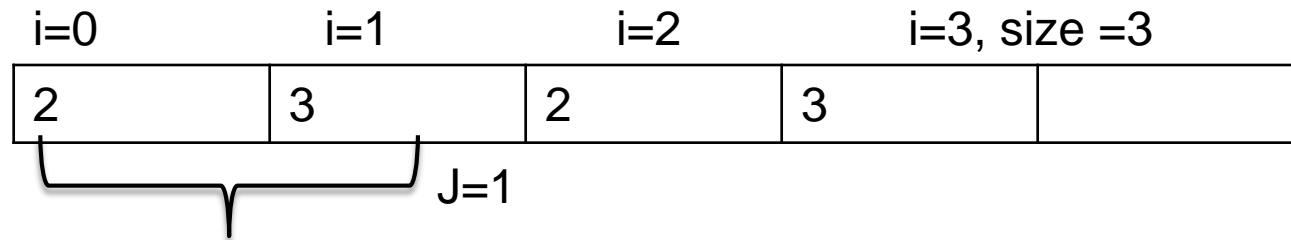
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Remove duplicate elements in an array

```
C:\Windows\system32\cmd.exe

Enter size of the array : 10
Enter elements in array : 2 3 4 2 2 2 2 5 3 4

Array elements after deleting duplicates : 2      3       4       5

----------------
(program exited with code: 0)

Press any key to continue . . . _
```
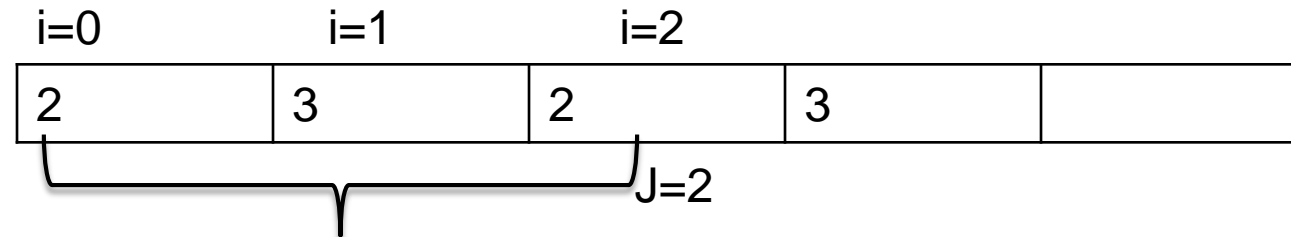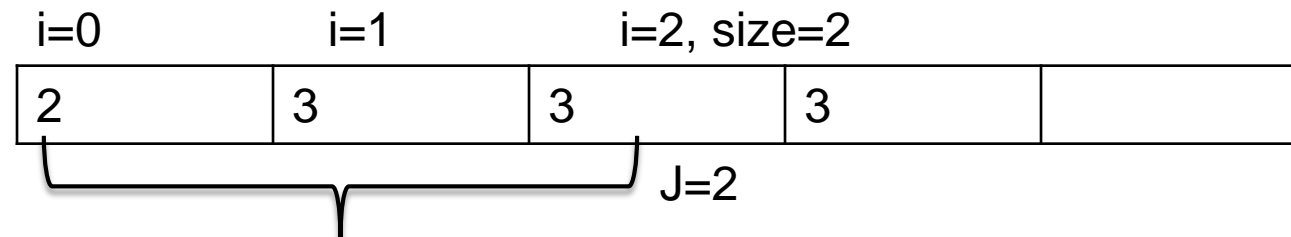
Remove duplicate elements in an array

i=0   i=1   i=2   i=3, size =3
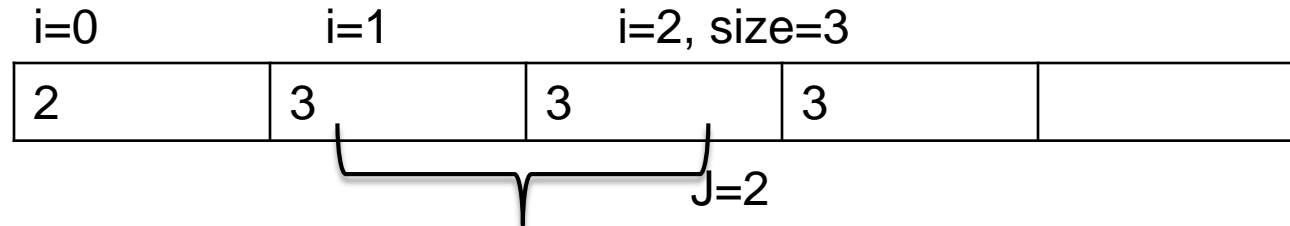
| 2 | 3 | 2 | 3 | |

J=1

A[0]==A[1]?- **NO**

i=0   i=1   i=2

| 2 | 3 | 2 | 3 | |

J=2

A[0]==A[2]?- **YES, then delete A[2], size=size-1, j--**

i=0   i=1   i=2, size=2

| 2 | 3 | 3 | 3 | |

J=2

A[0]==A[2]?- **NO**

Remove duplicate elements in an array

i=0	i=1	i=2, size=3		
2	3	3	3	

J=2

A[1]==A[2]?- **YES, then delete A[2], size=size-1, j--**
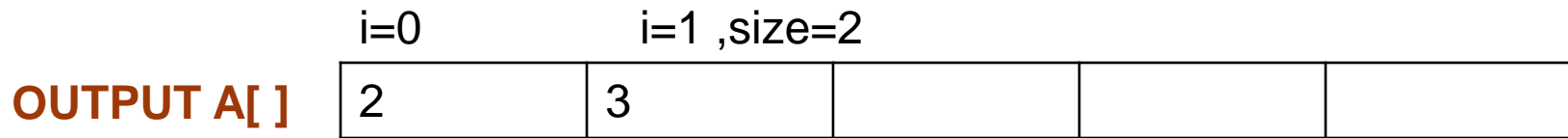
i=0	i=1 ,size=2			

OUTPUT A[ ]

2	3			

```c
int duplicateRemoval(int arr[],int size)
  { int i,k,j;
    for(i=0; i<size; i++)
    {
        for(j=i+1; j<size; j++)
        {
            if(arr[i] == arr[j])    /* If any duplicate found */
            {
                /* Delete the current duplicate element */
                for(k=j; k<size; k++)
                {
                    arr[k] = arr[k + 1];
                }
                size--; /* Decrement size after removing duplicate element .*/
                j--;       /* If shifting of elements occur then don't increment j */
            }
        }
    }    return(size); }
```

```c
void duplicateRemoval(int arr[],int *size)
  { int i,k,j;
    for(i=0; i<*size; i++)
    {
        for(j=i+1; j<*size; j++)
        {
          if(arr[i] == arr[j]) /* If any duplicate found */
           {
               for(k=j; k<*size; k++) /* Delete the current duplicate element */
               {
                  arr[k] = arr[k + 1];
               }
              (*size)--; /* Decrement size after removing duplicate element */
              j--; /* If shifting of elements occur then don't increment j */
           }
        }
    }
  }
```

Modified code- size is not returned. But passed as reference

```c
int duplicateRemoval(int arr[],int size)
 { int i,j;
   for(i=0; i<size; i++)
   {
      for(j=i+1; j<size; j++)
      {

         if(arr[i] == arr[j]) /* If any duplicate found */
         {
            /* Call Delete function to delete the current duplicate element */

            Delete(arr,j,size);

            /* Decrement size after removing duplicate element */
            size--;

            /* If shifting of elements occur then don't increment j */
            j--;
         }
      }
    }
   return(size);
 }
```

Modified code: Have delete as a function

```c
void Delete(int arr[],int j,int size)
{
 for(int k=j; k<size; k++)
    {
        arr[k] = arr[k + 1];
    }
}
```

Namah Shivaya