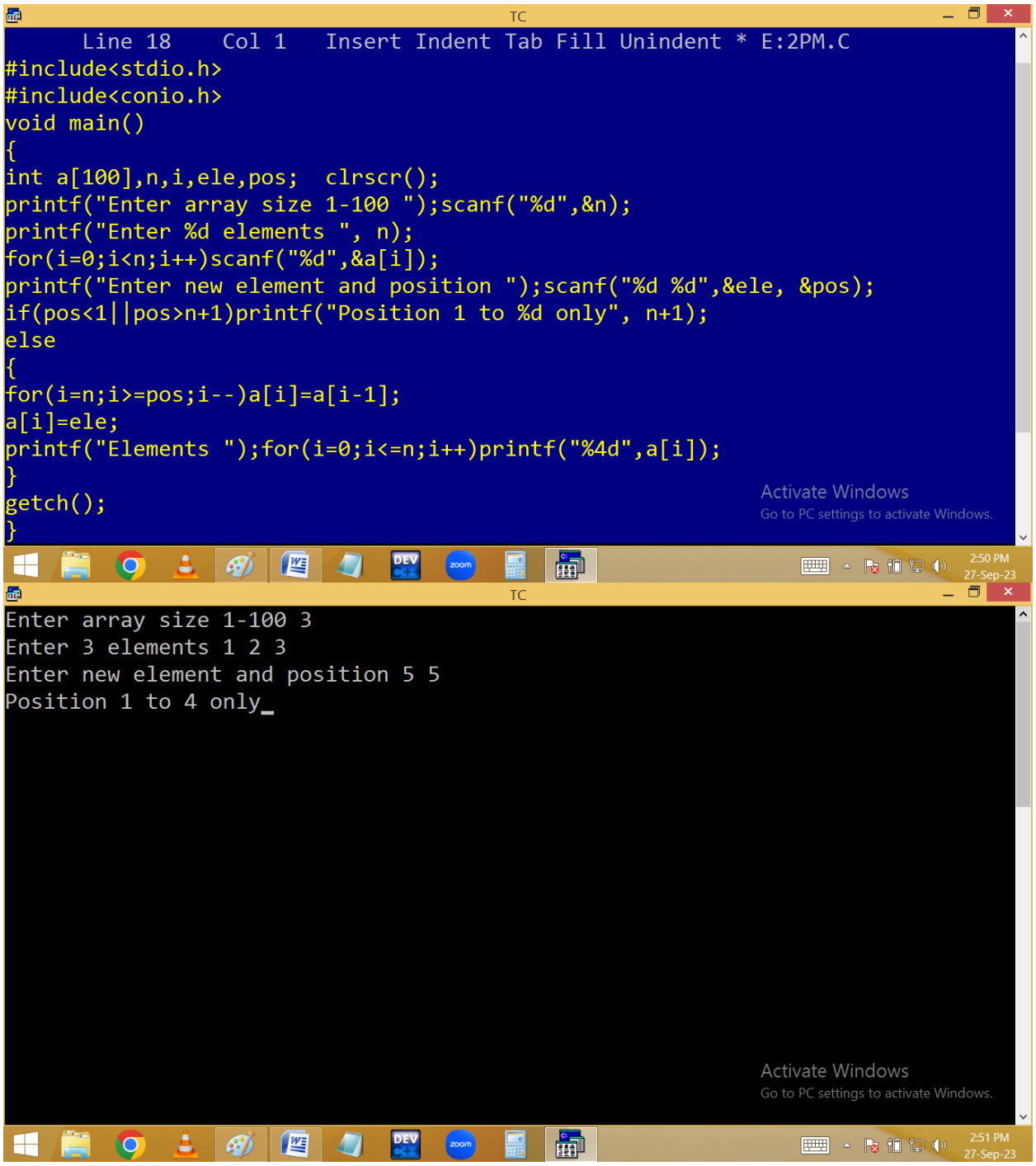
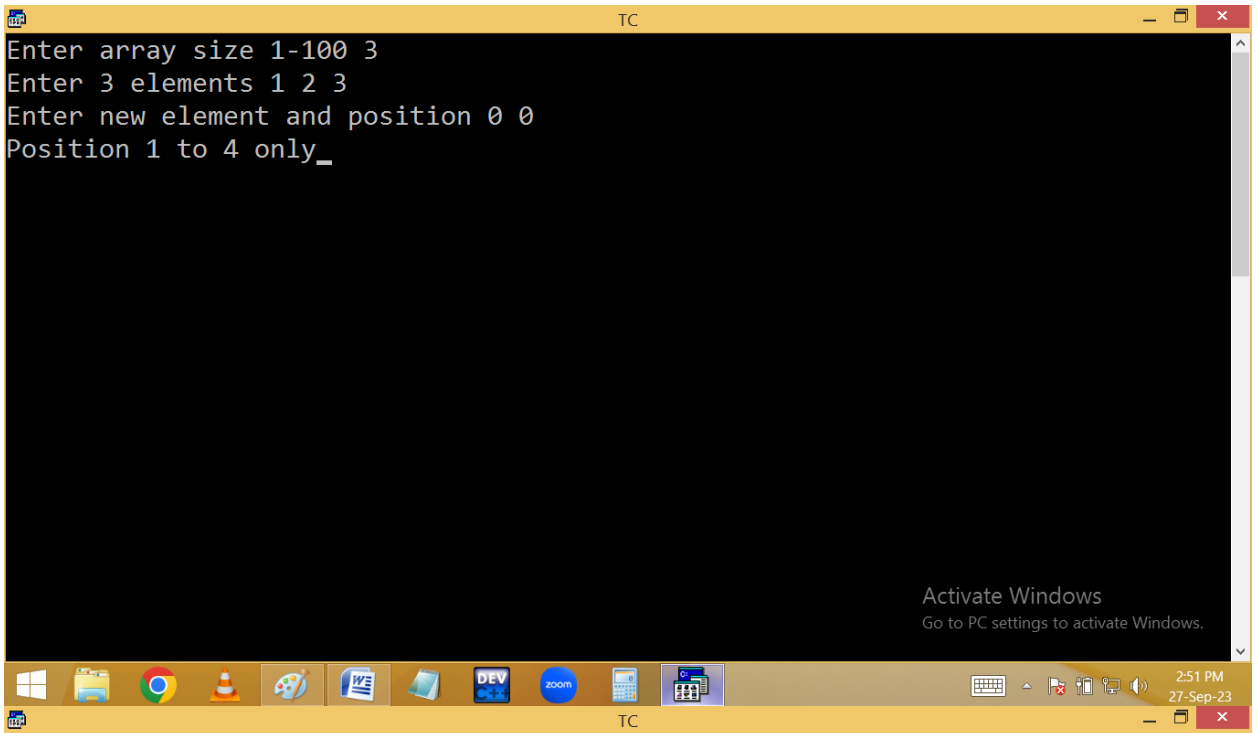
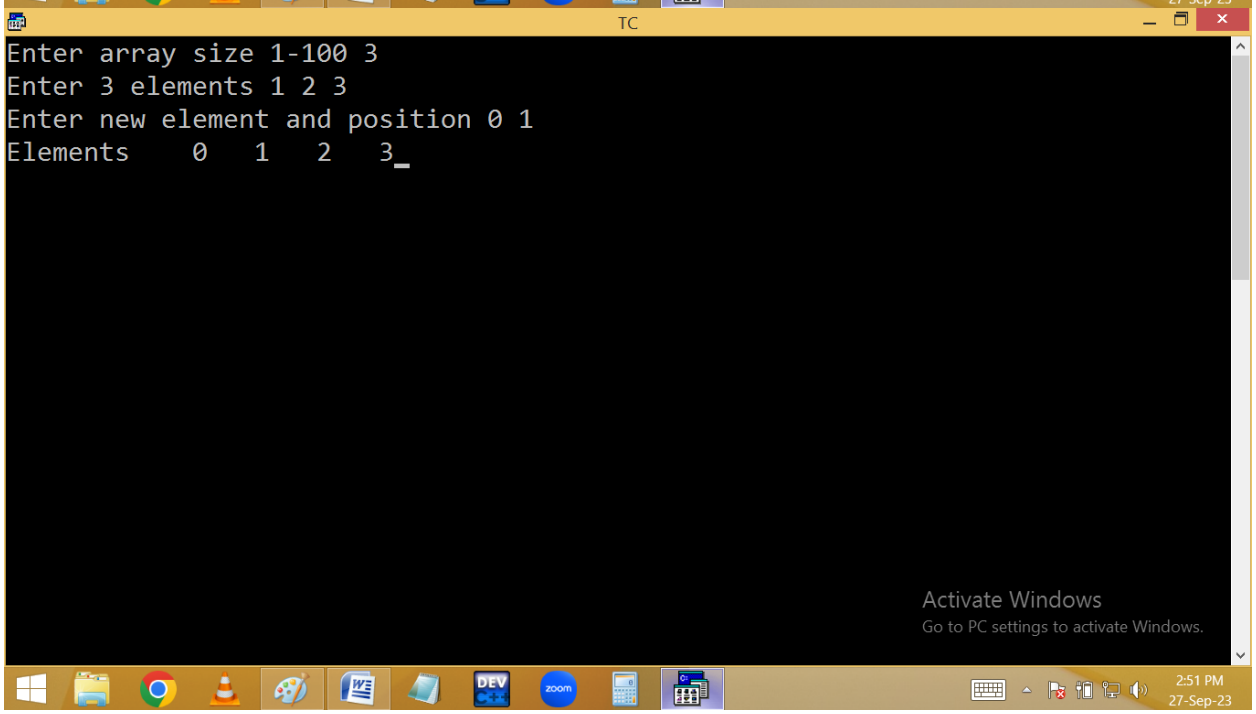
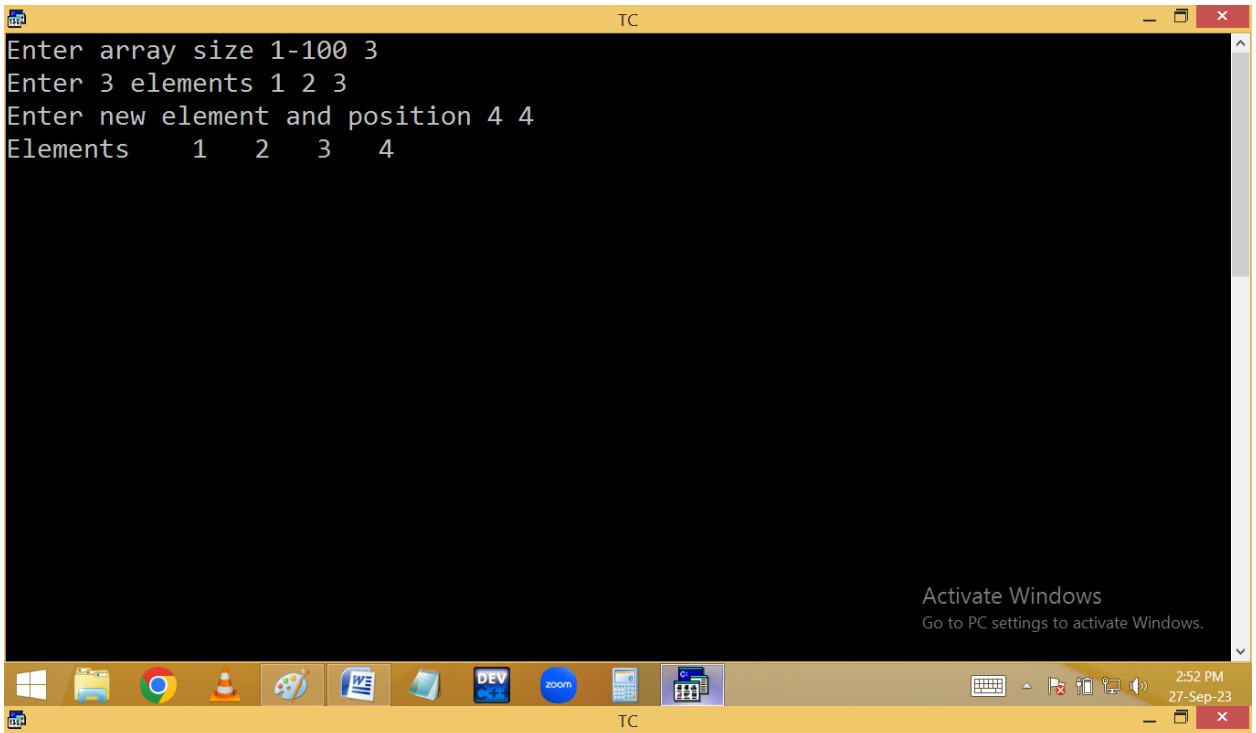
Inserting a new element into the array:

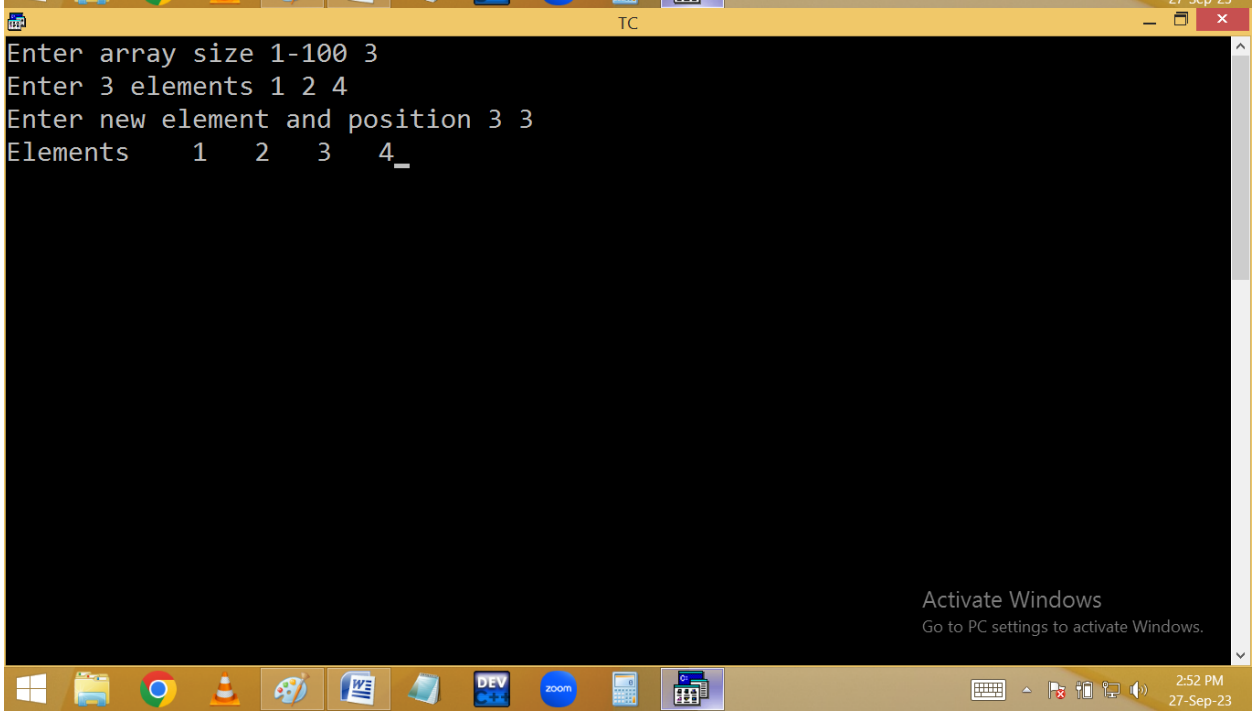
Right shifting of array elements:

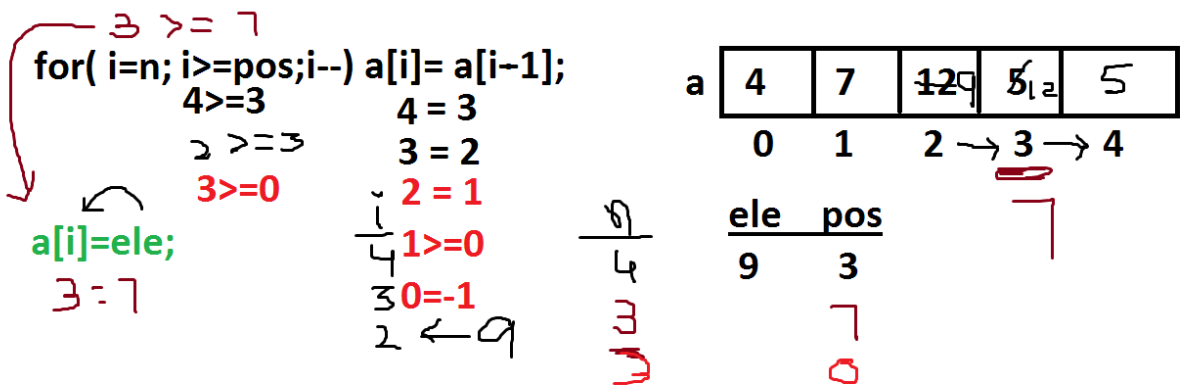



TC
Enter array size 1-100 3
Enter 3 elements 1 2 3
Enter new element and position 0 0
Position 1 to 4 only
Activate Windows
Go to PC settings to activate Windows.
2:51 PM
27-Sep-23


TC
Enter array size 1-100 3
Enter 3 elements 1 2 3
Enter new element and position 0 1
Elements 0 1 2 3
Activate Windows
Go to PC settings to activate Windows.
2:51 PM
27-Sep-23

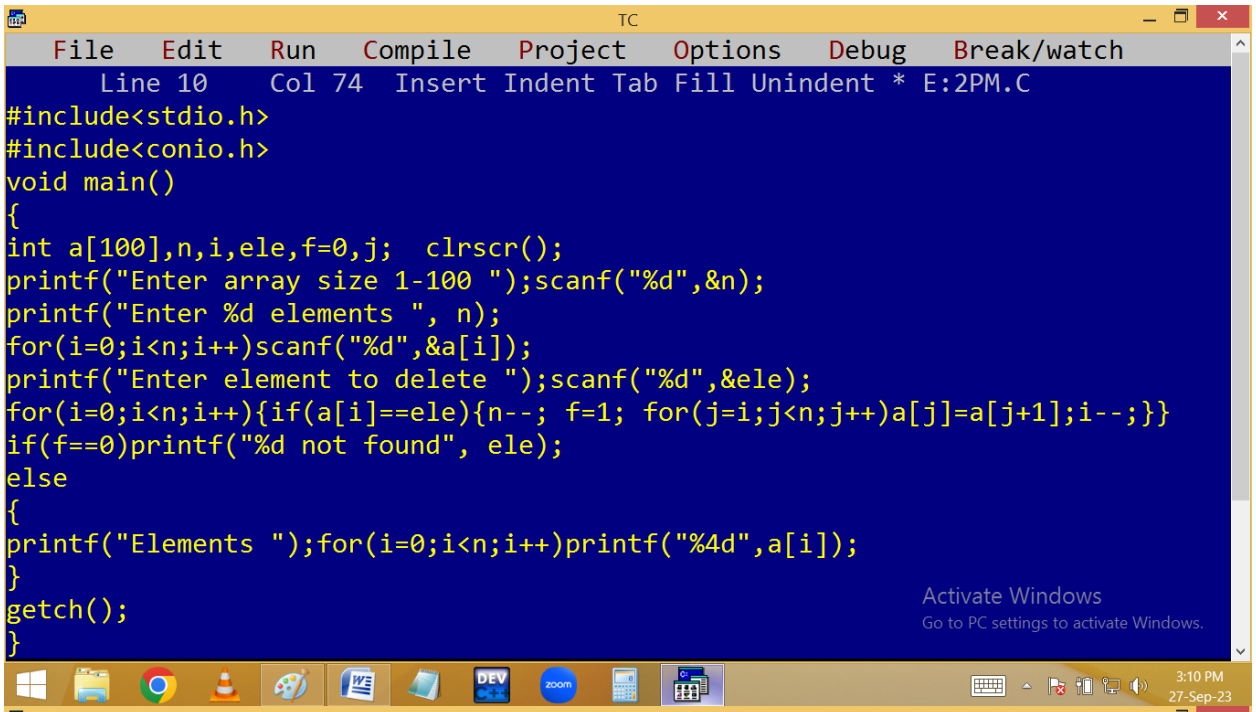

TC
Enter array size 1-100 3
Enter 3 elements 1 2 3
Enter new element and position 4 4
Elements 1 2 3 4
Activate Windows
Go to PC settings to activate Windows.
2:52 PM
27-Sep-23

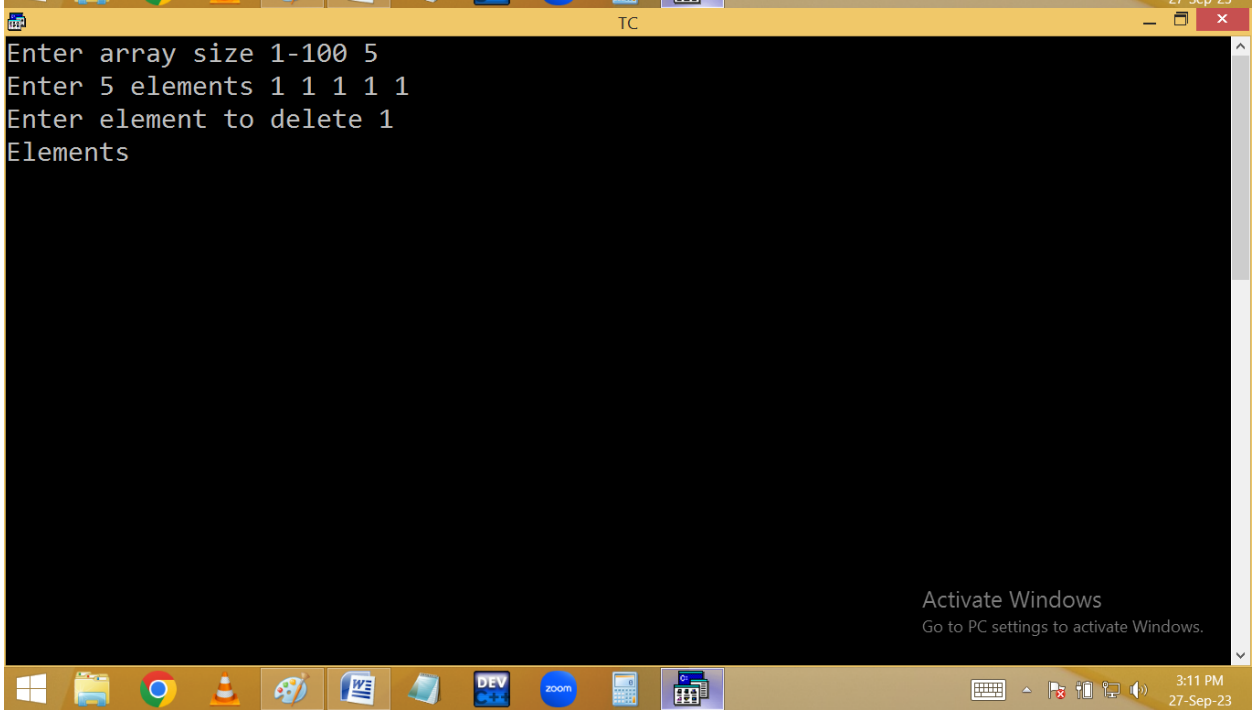

TC
Enter array size 1-100 3
Enter 3 elements 1 2 4
Enter new element and position 3 3
Elements 1 2 3 4
Activate Windows
Go to PC settings to activate Windows.
2:52 PM
27-Sep-23

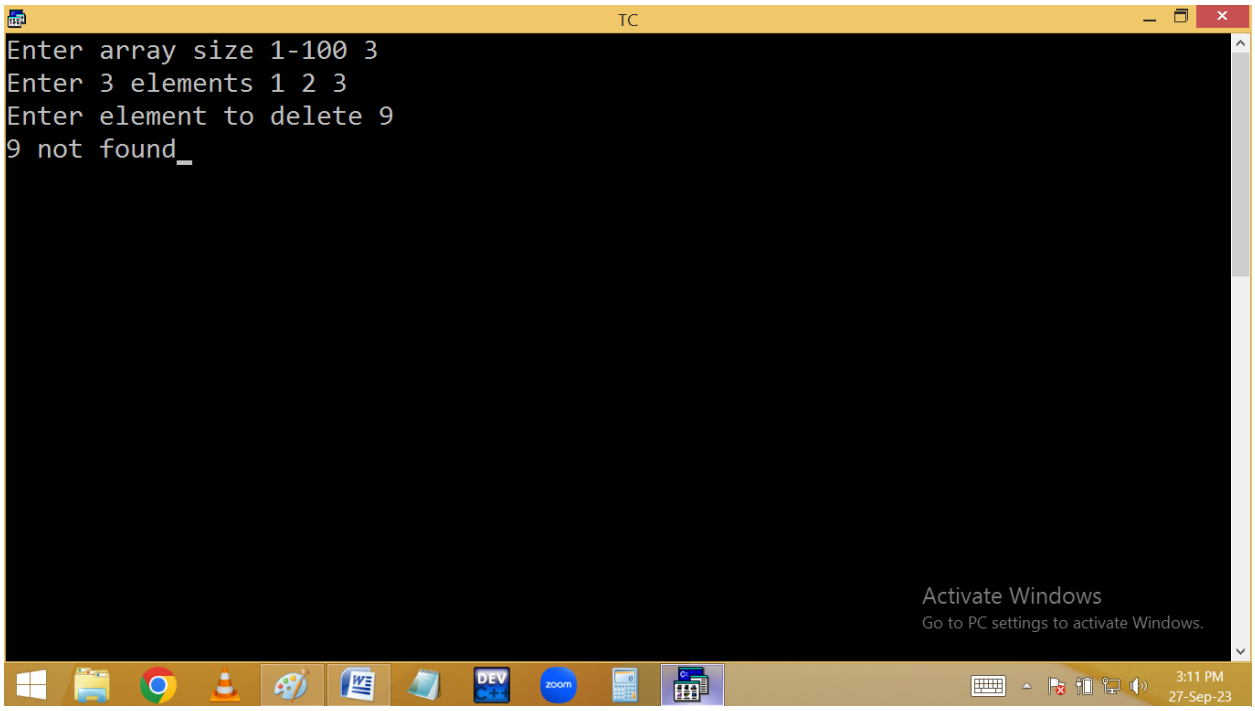


Deleting an array element:

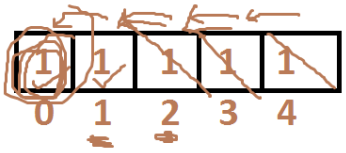
Left shifting of array elements:


TC
File Edit Run Compile Project Options Debug Break/watch
Line 10 Col 74 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a[100],n,i,ele,f=0,j; clrscr();
printf("Enter array size 1-100 ");scanf("%d",&n);
printf("Enter %d elements ", n);
for(i=0;i<n;i++)scanf("%d",&a[i]);
printf("Enter element to delete ");scanf("%d",&ele);
for(i=0;i<n;i++){if(a[i]==ele){n--; f=1; for(j=i;j<n;j++)a[j]=a[j+1];i--;}}
if(f==0)printf("%d not found", ele);
else
{
printf("Elements ");for(i=0;i<n;i++)printf("%4d",a[i]);
}
getch();
}
Activate Windows
Go to PC settings to activate Windows.
3:10 PM
27-Sep-23

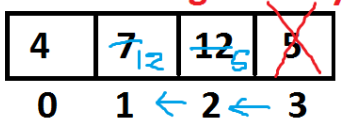

TC
Enter array size 1-100 5
Enter 5 elements 1 1 1 1 1
Enter element to delete 1
Elements
Activate Windows
Go to PC settings to activate Windows.
3:11 PM
27-Sep-23




```
for(i=0;i<n;i++)
{
if(a[i]==ele)
{
n--;f=1;
for(j=i ;j<n;  j++) a[ j]=a[ j+1];
}
```



Left shifting of array elements



ele

7

f

0

i

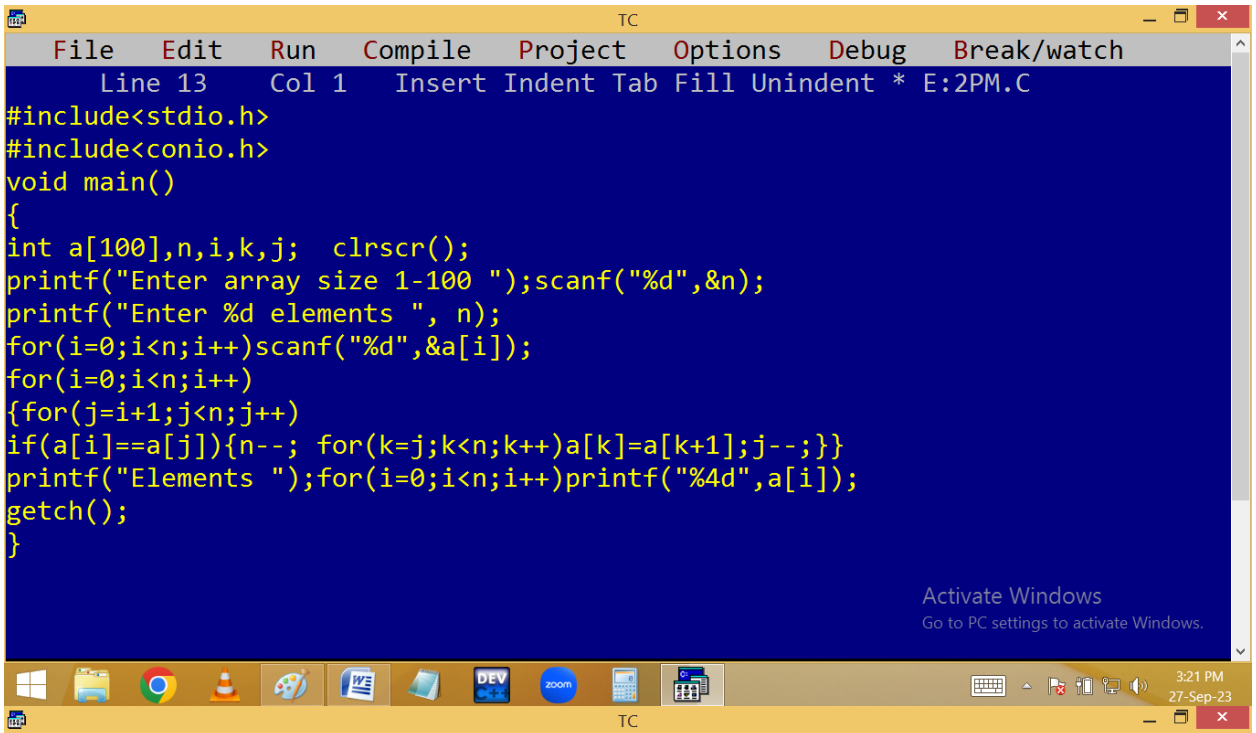
0

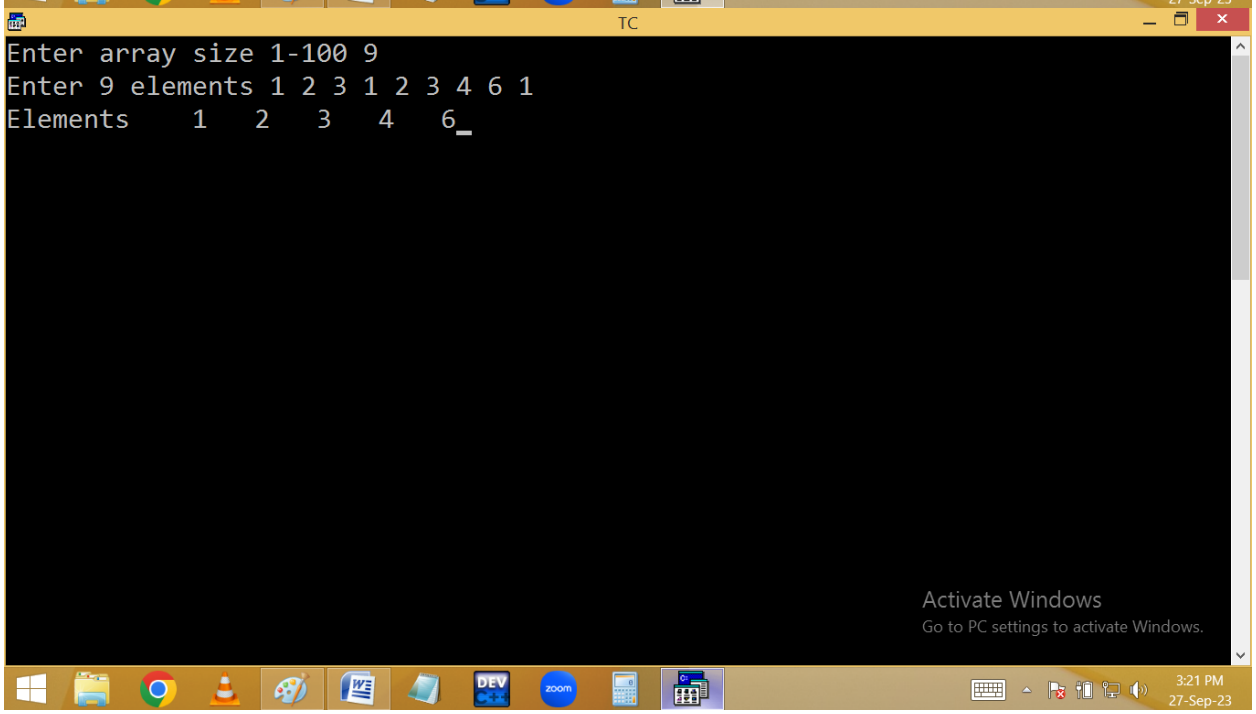
1

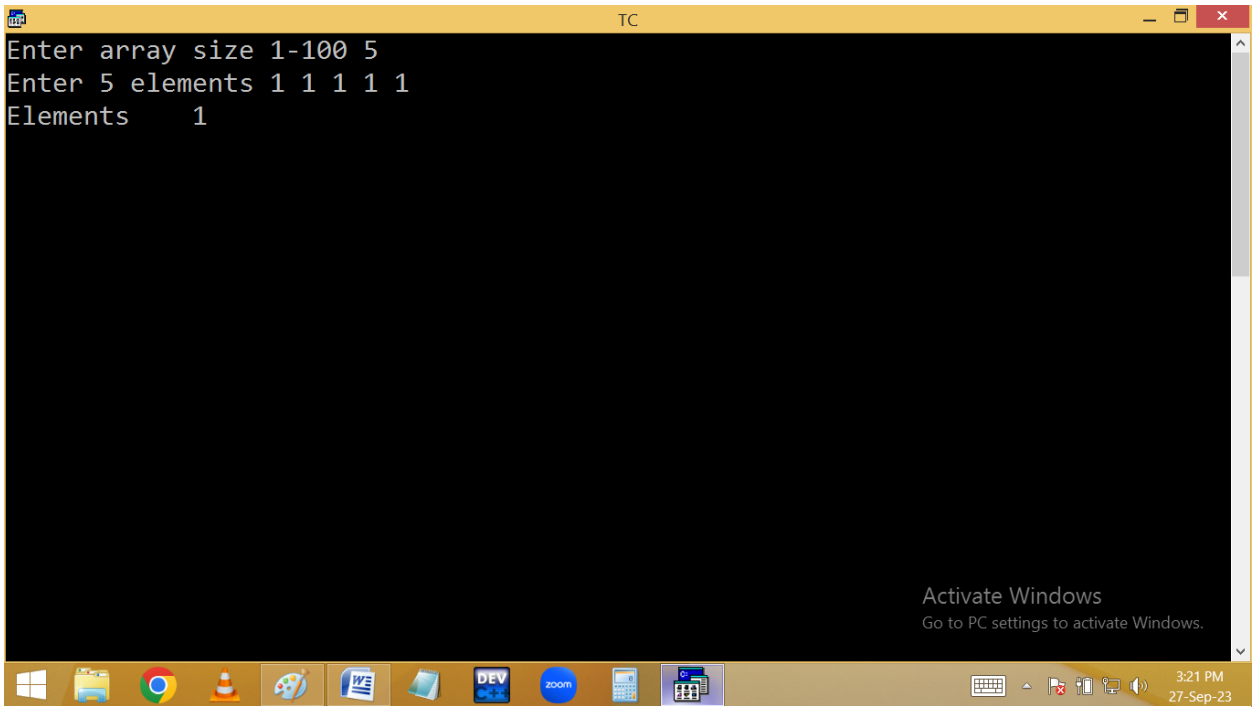
j

1

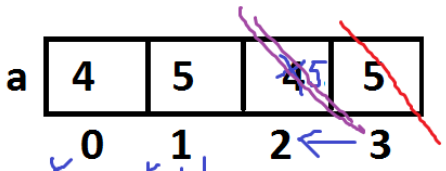
Deleting duplicate elements from array:


TC
File Edit Run Compile Project Options Debug Break/watch
Line 13 Col 1 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a[100],n,i,k,j; clrscr();
printf("Enter array size 1-100 ");scanf("%d",&n);
printf("Enter %d elements ", n);
for(i=0;i<n;i++)scanf("%d",&a[i]);
for(i=0;i<n;i++)
{for(j=i+1;j<n;j++)
if(a[i]==a[j]){n--; for(k=j;k<n;k++)a[k]=a[k+1];j--;}}
printf("Elements ");for(i=0;i<n;i++)printf("%4d",a[i]);
getch();
}
Activate Windows
Go to PC settings to activate Windows.
3:21 PM
27-Sep-23

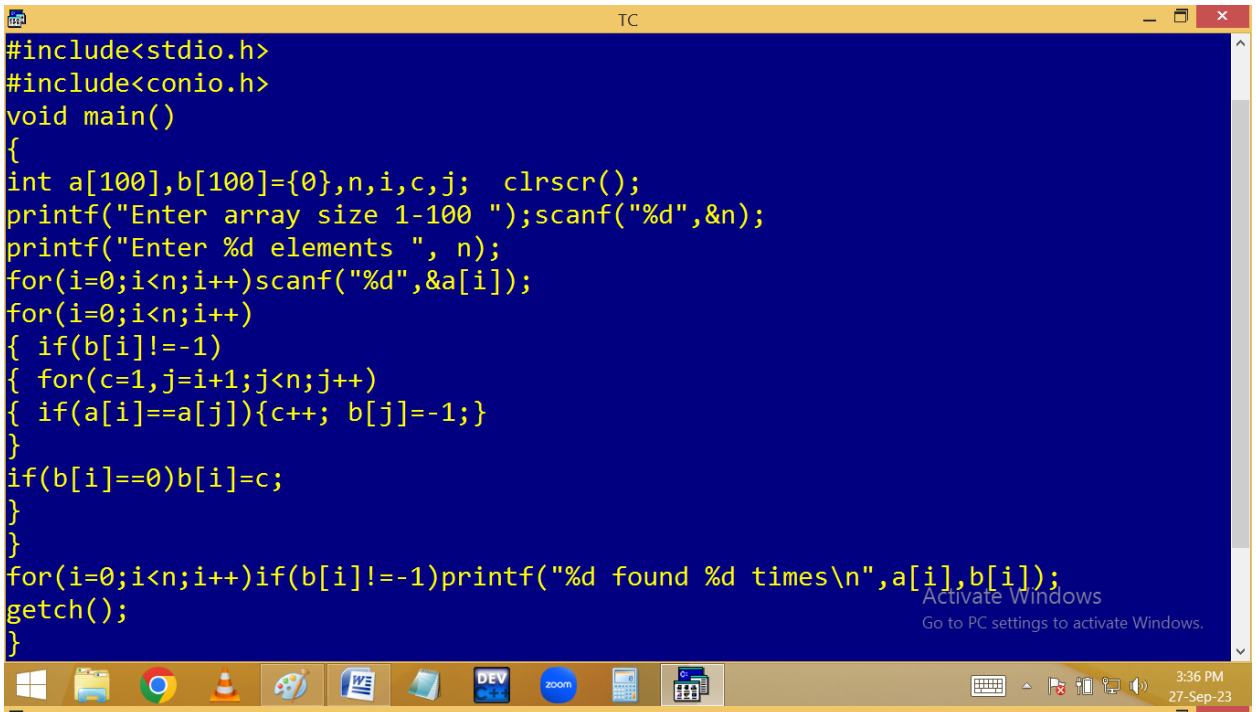

TC
Enter array size 1-100 9
Enter 9 elements 1 2 3 1 2 3 4 6 1
Elements 1 2 3 4 6
Activate Windows
Go to PC settings to activate Windows.
3:21 PM
27-Sep-23

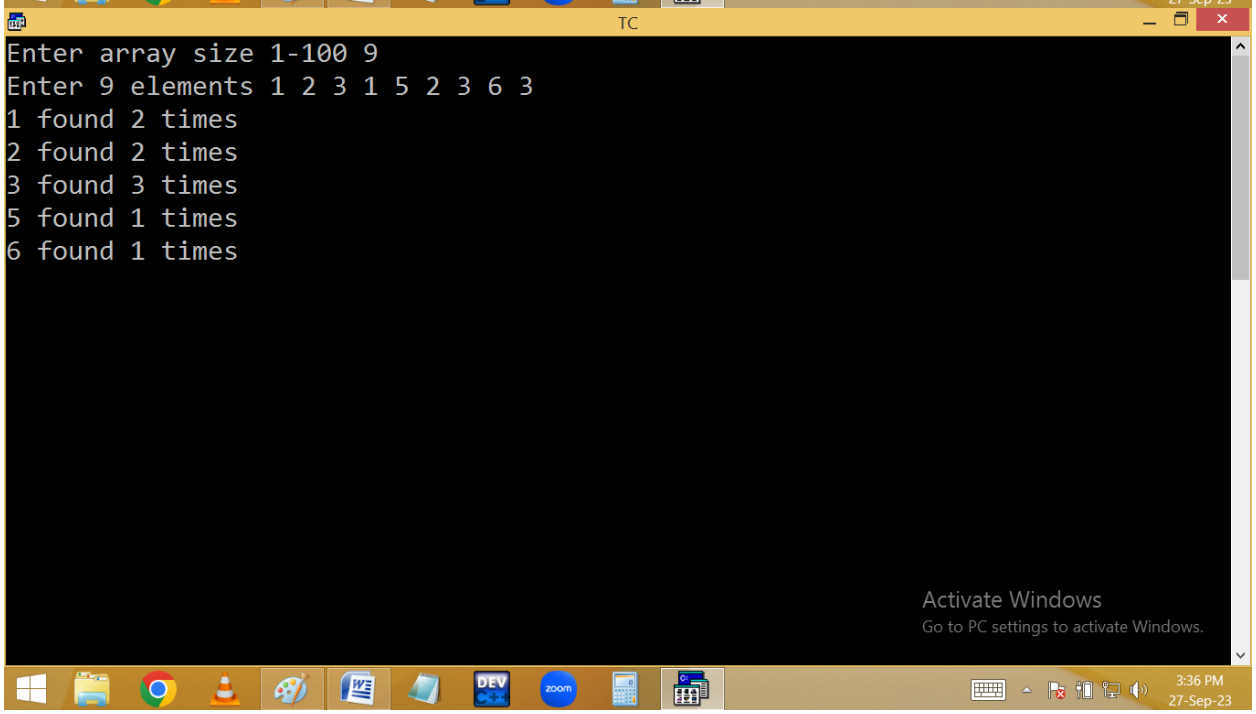



```
for(i=0;i<n;i++)
{
 for( j=i+1;j<n;j++)
 {
 if(a[i]==a[j])
 {
 n--; for(k=j; k<n;k++) a[k]=a[k+1];
 }
```

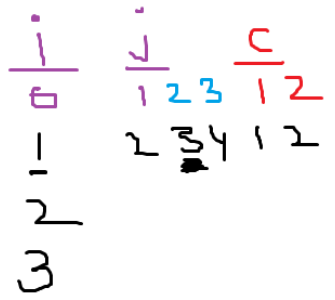


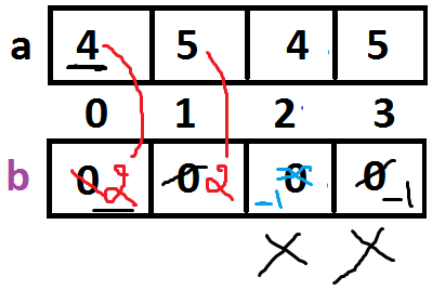
Finding frequency of array elements:


TC
#include<stdio.h>
#include<conio.h>
void main()
{
int a[100],b[100]={0},n,i,c,j; clrscr();
printf("Enter array size 1-100 ");scanf("%d",&n);
printf("Enter %d elements ", n);
for(i=0;i<n;i++)scanf("%d",&a[i]);
for(i=0;i<n;i++)
{ if(b[i]!=-1)
{ for(c=1,j=i+1;j<n;j++)
{ if(a[i]==a[j]){c++; b[j]=-1;}
}
if(b[i]==0)b[i]=c;
}
}
for(i=0;i<n;i++)if(b[i]!=-1)printf("%d found %d times\n",a[i],b[i]);
getch();
}
Activate Windows
Go to PC settings to activate Windows.
3:36 PM
27-Sep-23


TC
Enter array size 1-100 9
Enter 9 elements 1 2 3 1 5 2 3 6 3
1 found 2 times
2 found 2 times
3 found 3 times
5 found 1 times
6 found 1 times
Activate Windows
Go to PC settings to activate Windows.
3:36 PM
27-Sep-23

```
for(i=0;i<n;i++)
{  c=1;   if(b[i]!=-1)
          {
 for( j=i+1;j<n;j++)
 {
 if(a[i]==a[j])
 { c++; b[j]=-1;}
  if(b[i]==0)b[i]=c;
  }  }
```





Merging of unsorted array elements:

Decimal to binary conversion

10 ➔ 0000 0000 0000 1010