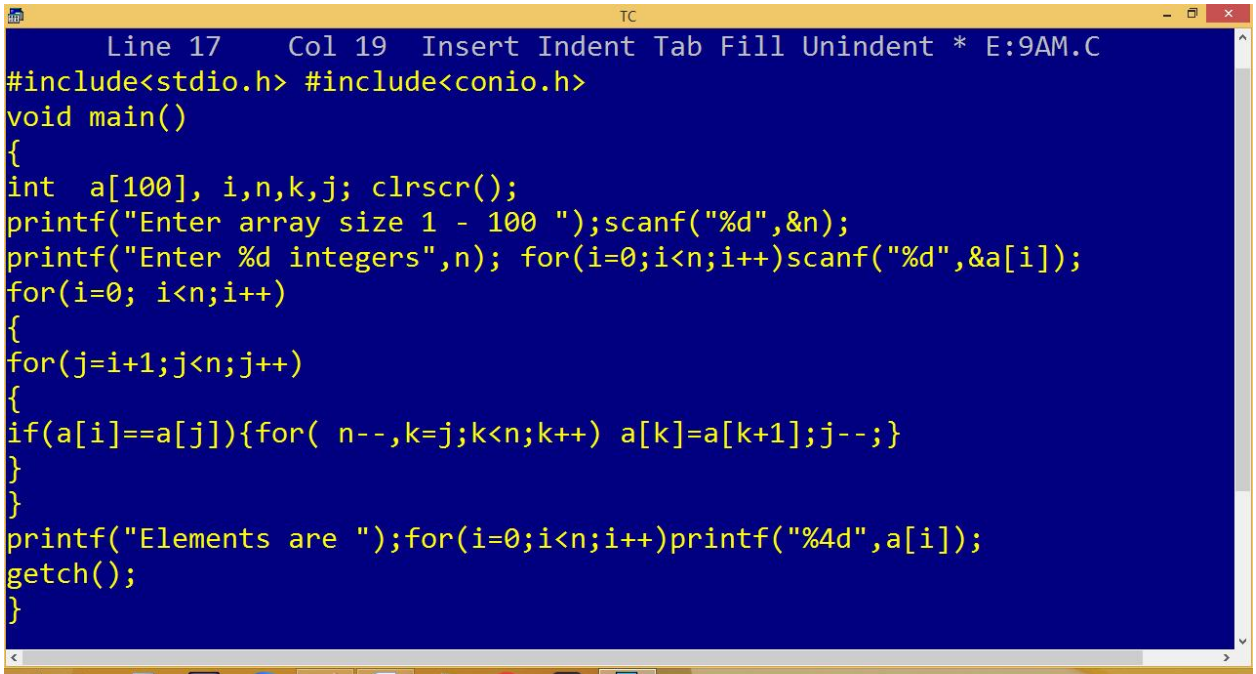
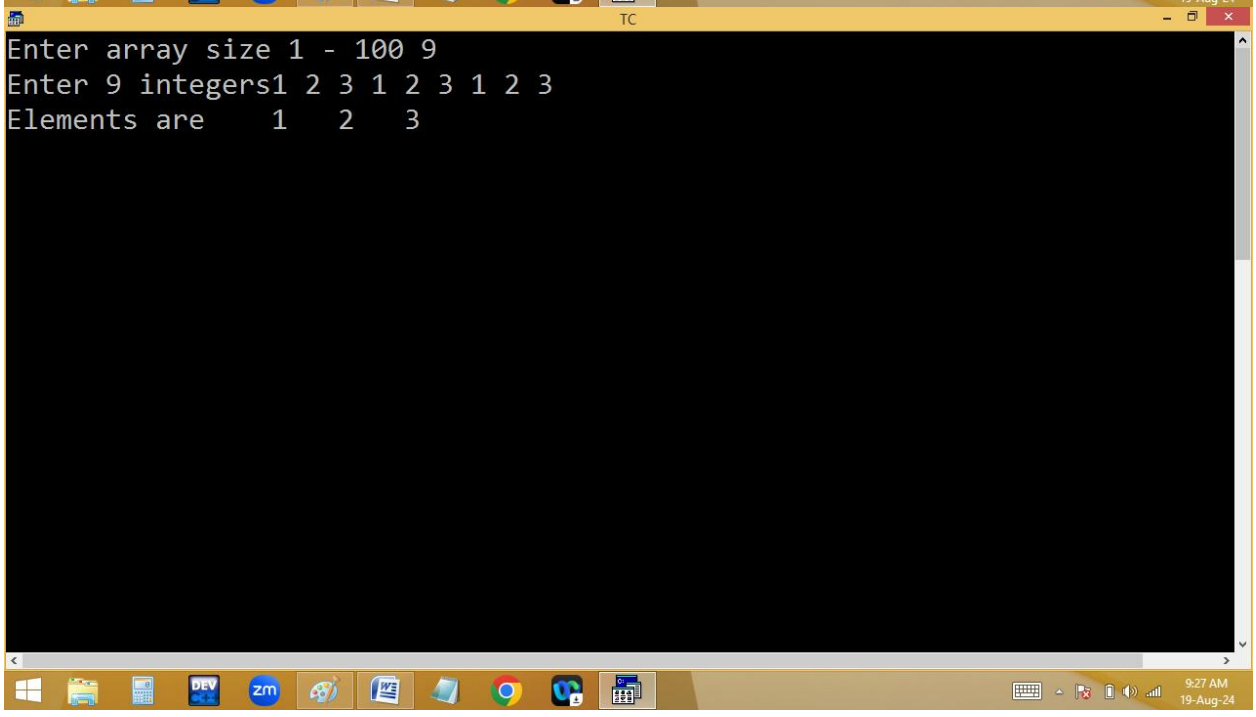
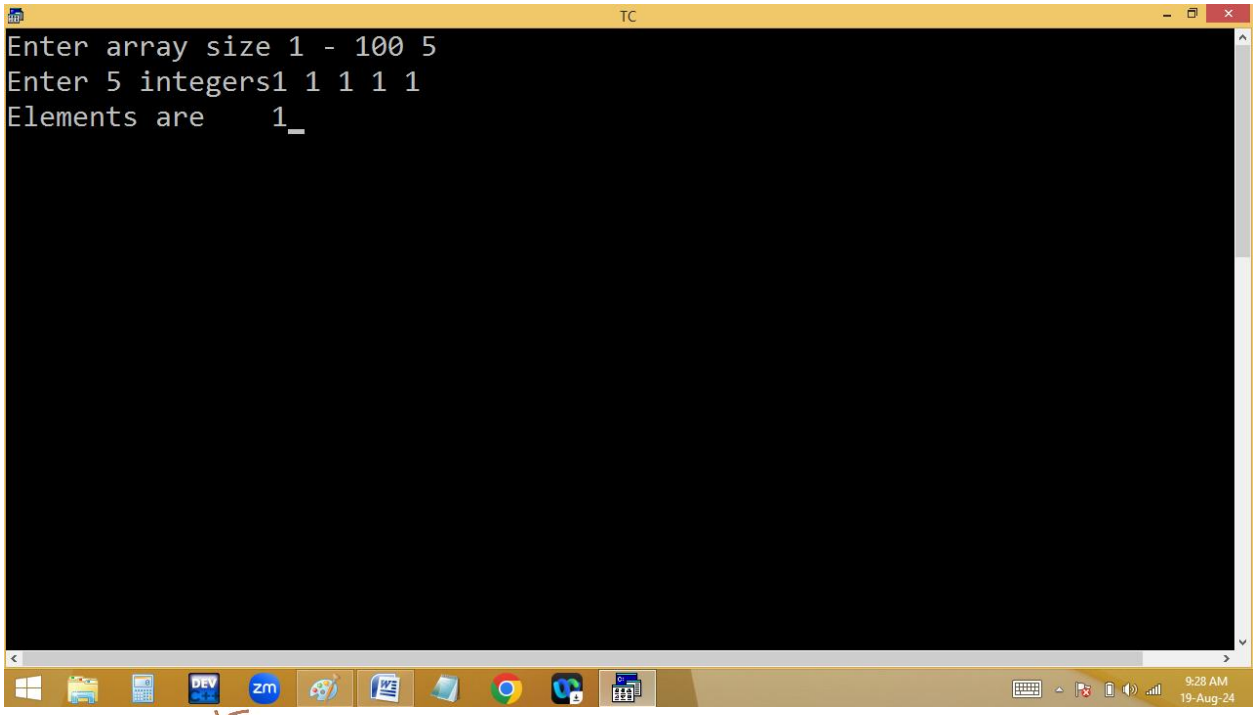
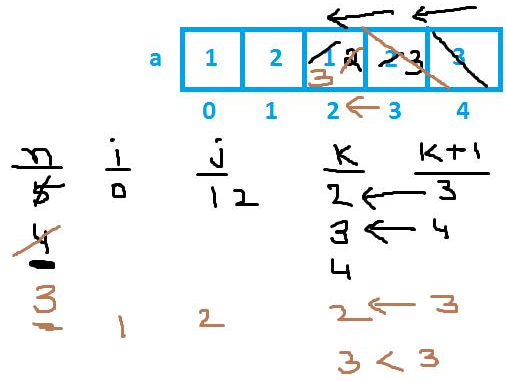
Deleting duplicate elements from array:



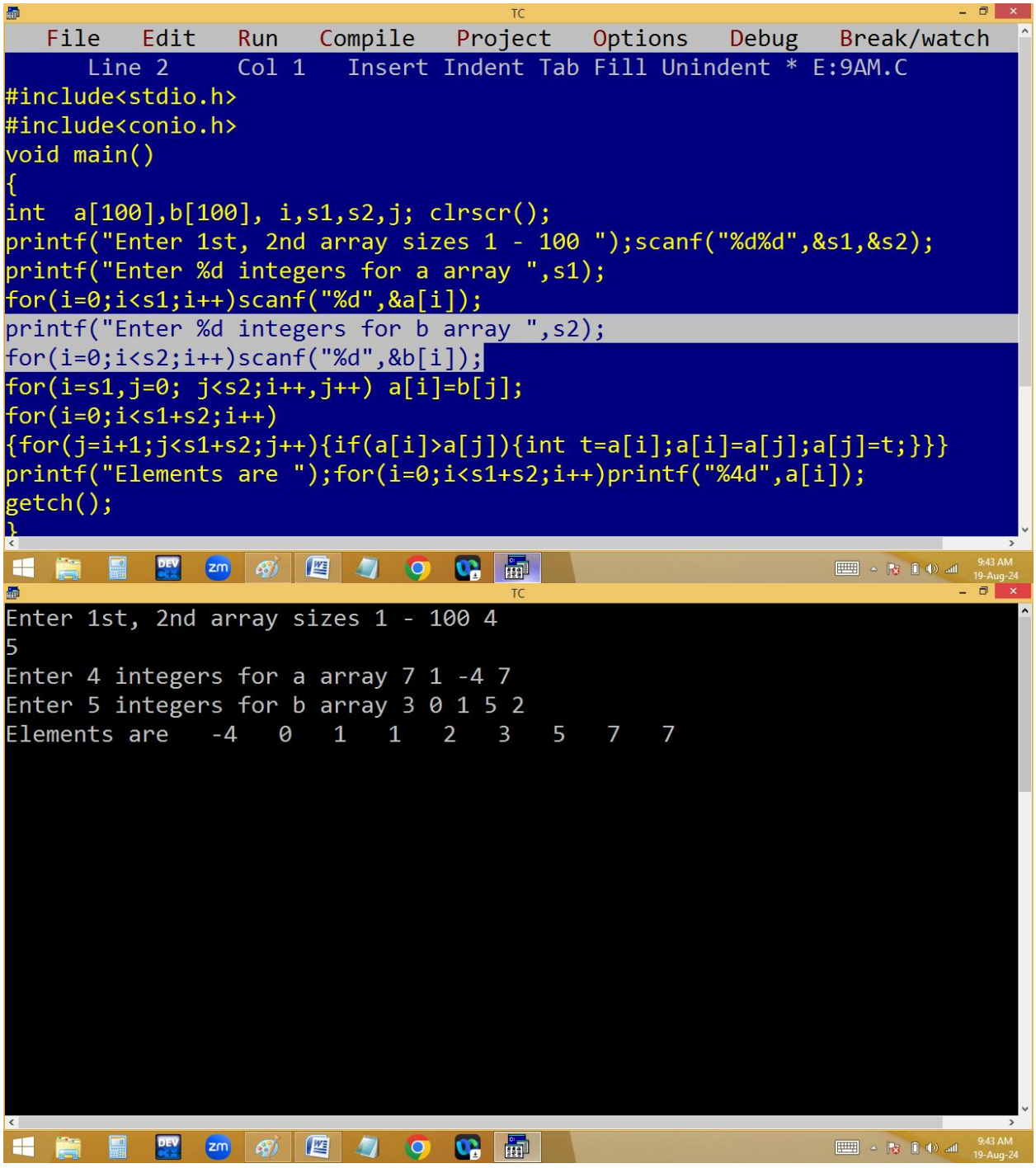


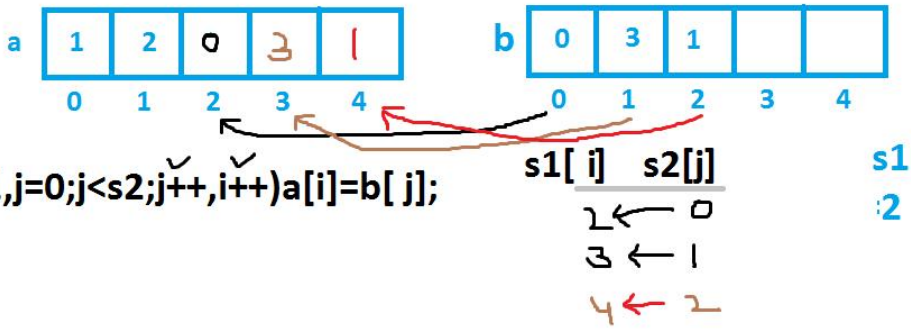



```
for(i=0;i<n;i++)
{
for(j=i+1;j<n;j++)
{
 if(a[i]==a[j])
 {
 for(n--, k=j;k<n;k++)a[k]=a[k+1];
 j--;
 }
 }
```

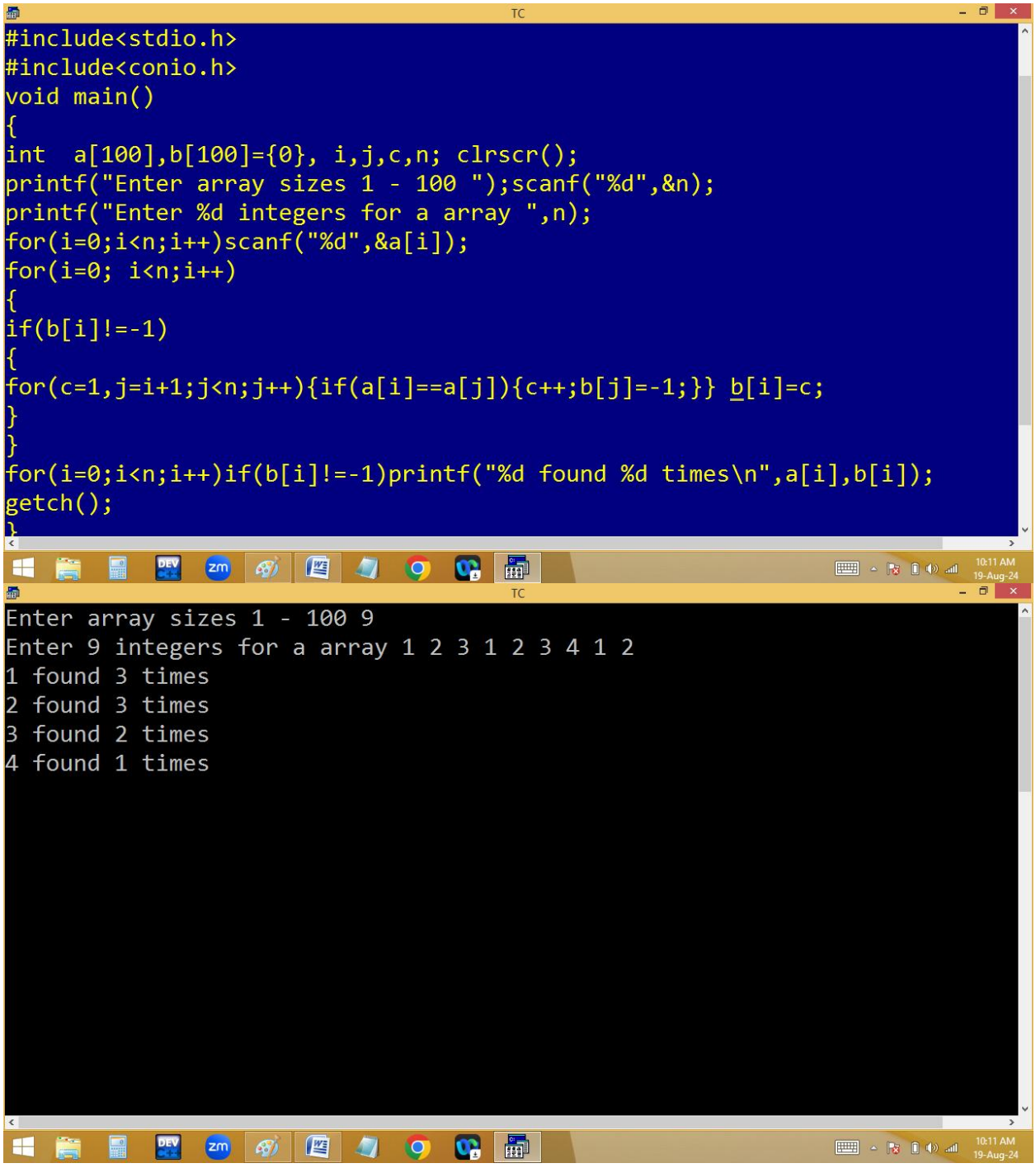


Merging or arryas:

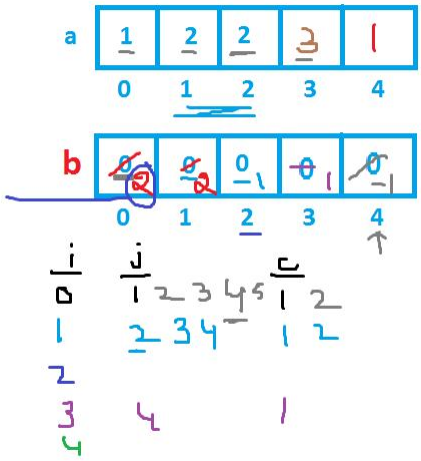

TC
File Edit Run Compile Project Options Debug Break/watch
Line 2 Col 1 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a[100],b[100], i,s1,s2,j; clrscr();
printf("Enter 1st, 2nd array sizes 1 - 100 ");scanf("%d%d",&s1,&s2);
printf("Enter %d integers for a array ",s1);
for(i=0;i<s1;i++)scanf("%d",&a[i]);
printf("Enter %d integers for b array ",s2);
for(i=0;i<s2;i++)scanf("%d",&b[i]);
for(i=s1,j=0; j<s2;i++,j++) a[i]=b[j];
for(i=0;i<s1+s2;i++)
{for(j=i+1;j<s1+s2;j++){if(a[i]>a[j]){int t=a[i];a[i]=a[j];a[j]=t;}}}
printf("Elements are ");for(i=0;i<s1+s2;i++)printf("%4d",a[i]);
getch();
}
9:43 AM
19-Aug-24
TC
Enter 1st, 2nd array sizes 1 - 100 4
5
Enter 4 integers for a array 7 1 -4 7
Enter 5 integers for b array 3 0 1 5 2
Elements are -4 0 1 1 2 3 5 7 7
9:43 AM
19-Aug-24



Frequency of array elements:

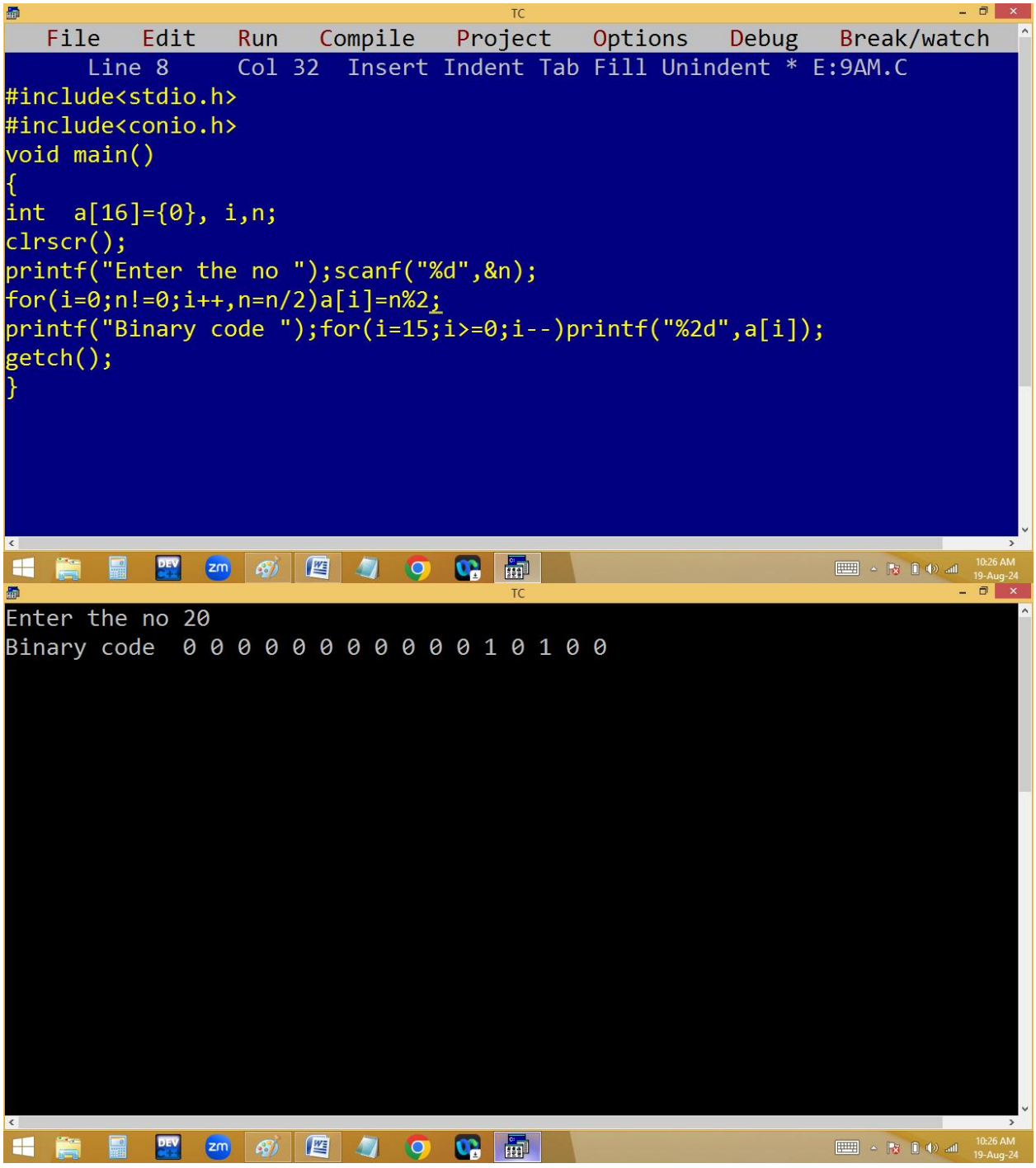

TC
#include<stdio.h>
#include<conio.h>
void main()
{
int a[100],b[100]={0}, i,j,c,n; clrscr();
printf("Enter array sizes 1 - 100 ");scanf("%d",&n);
printf("Enter %d integers for a array ",n);
for(i=0;i<n;i++)scanf("%d",&a[i]);
for(i=0; i<n;i++)
{
if(b[i]!=-1)
{
for(c=1,j=i+1;j<n;j++){if(a[i]==a[j]){c++;b[j]=-1;}} b[i]=c;
}
}
for(i=0;i<n;i++)if(b[i]!=-1)printf("%d found %d times\n",a[i],b[i]);
getch();
}
10:11 AM
19-Aug-24
TC
Enter array sizes 1 - 100 9
Enter 9 integers for a array 1 2 3 1 2 3 4 1 2
1 found 3 times
2 found 3 times
3 found 2 times
4 found 1 times
10:11 AM
19-Aug-24

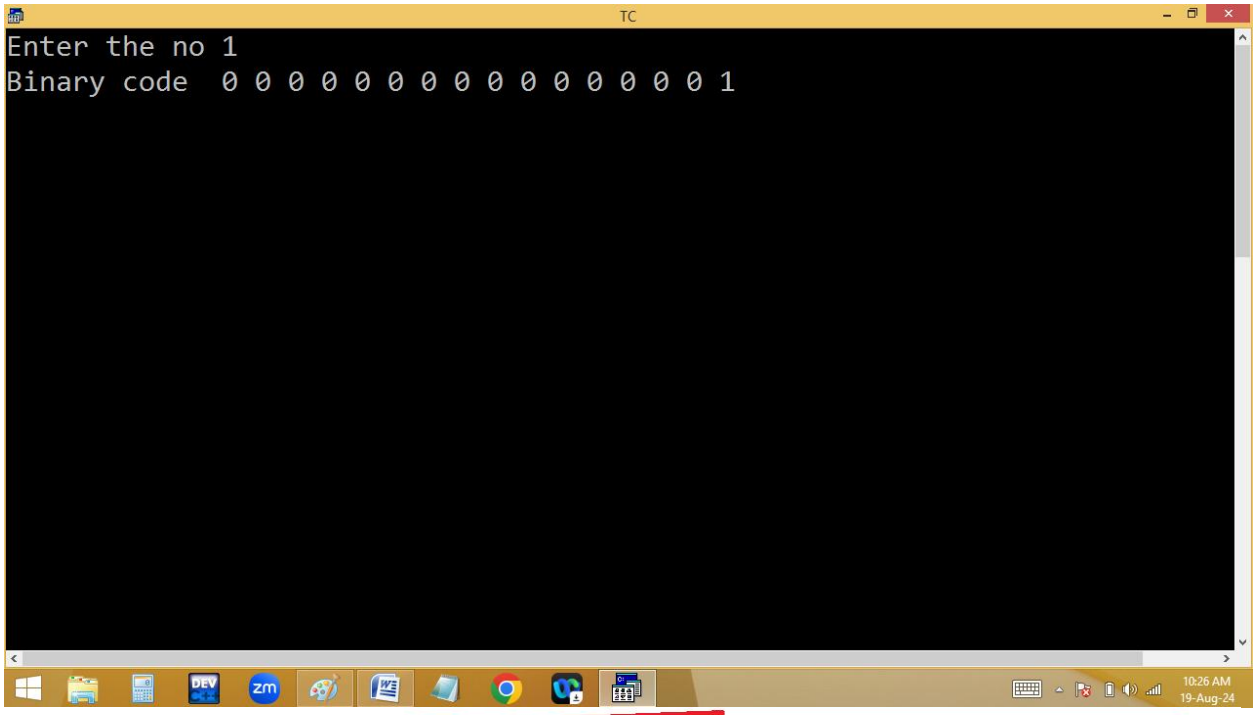
```
for(i=0;i<n;i++)
{
if(b[i]!=-1)
{
for(j=i+1, c=1; j<n;j++)
if(a[i]==a[j]){  c++; b[j]=-1; }
b[i]=c;
}
for(i=0;i<n;i++)if(b[i]!=-1)p(a[i] found b[i] times);
```

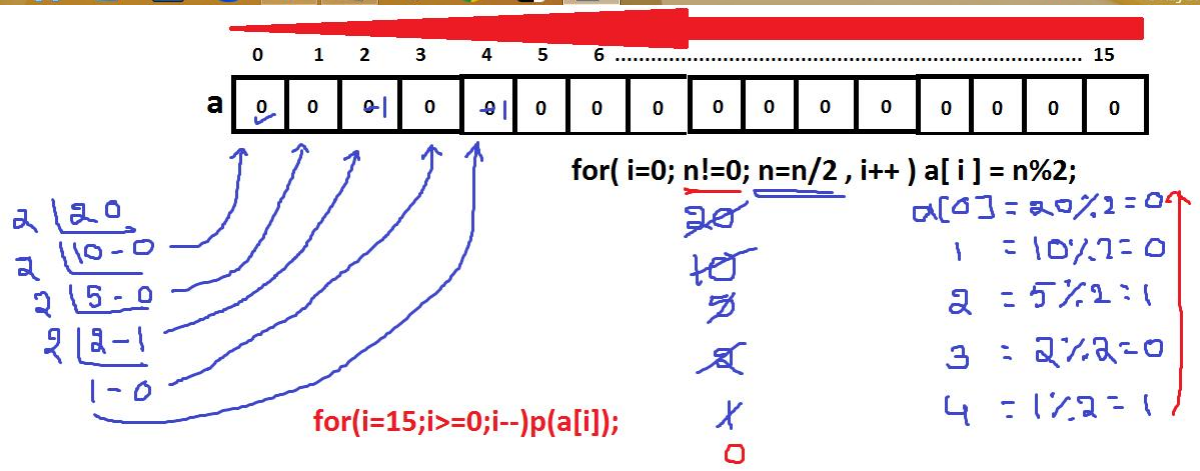


Decimal to binary conversion:

20 ➔ 0000 0000 0001 0100


TC
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 32 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a[16]={0}, i,n;
clrscr();
printf("Enter the no ");scanf("%d",&n);
for(i=0;n!=0;i++,n=n/2)a[i]=n%2;
printf("Binary code ");for(i=15;i>=0;i--)printf("%2d",a[i]);
getch();
}
TC
Enter the no 20
Binary code 0 0 0 0 0 0 0 0 0 0 0 1 0 1 0 0

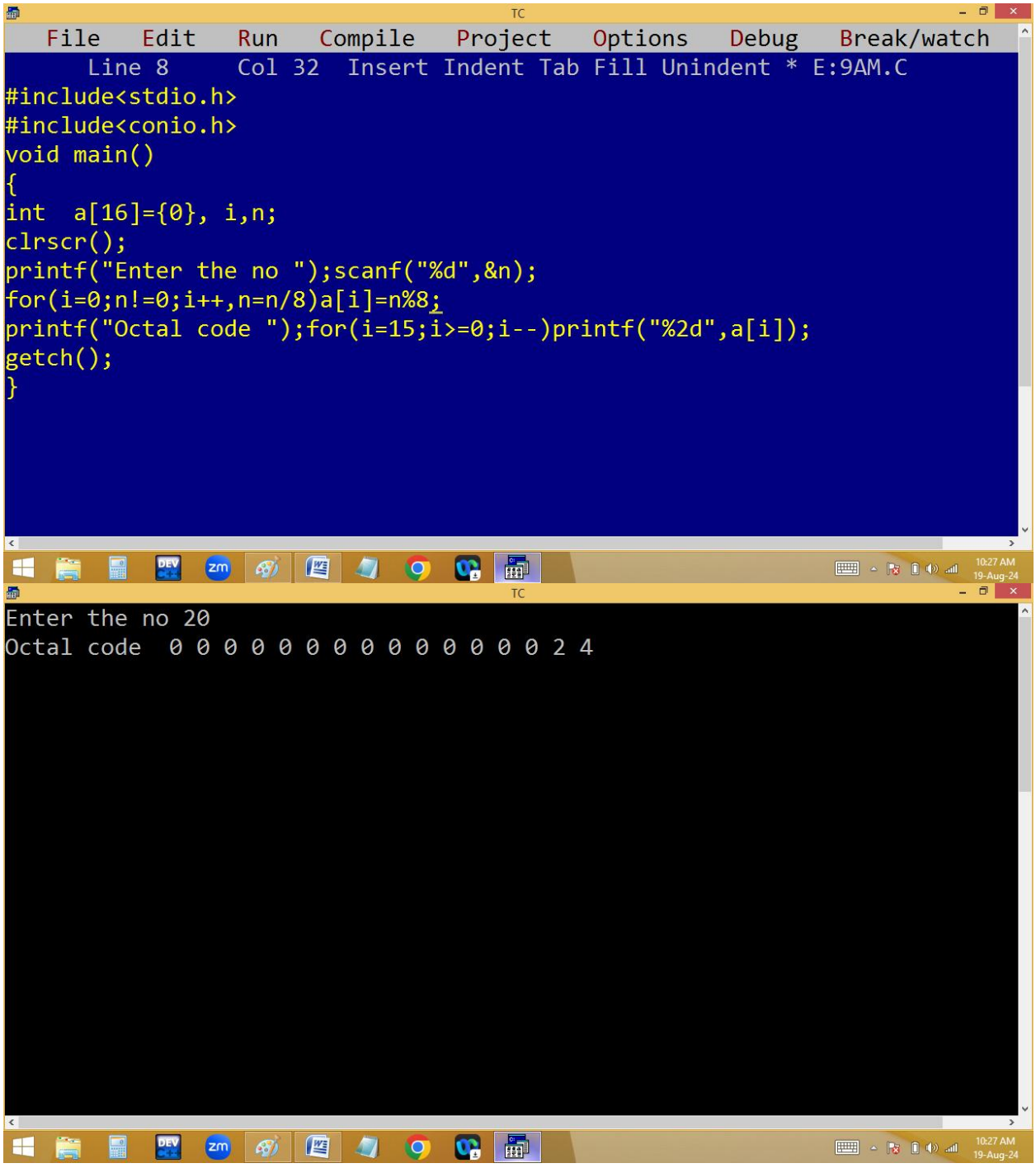




Decimal to octal:

৪ | ৯০

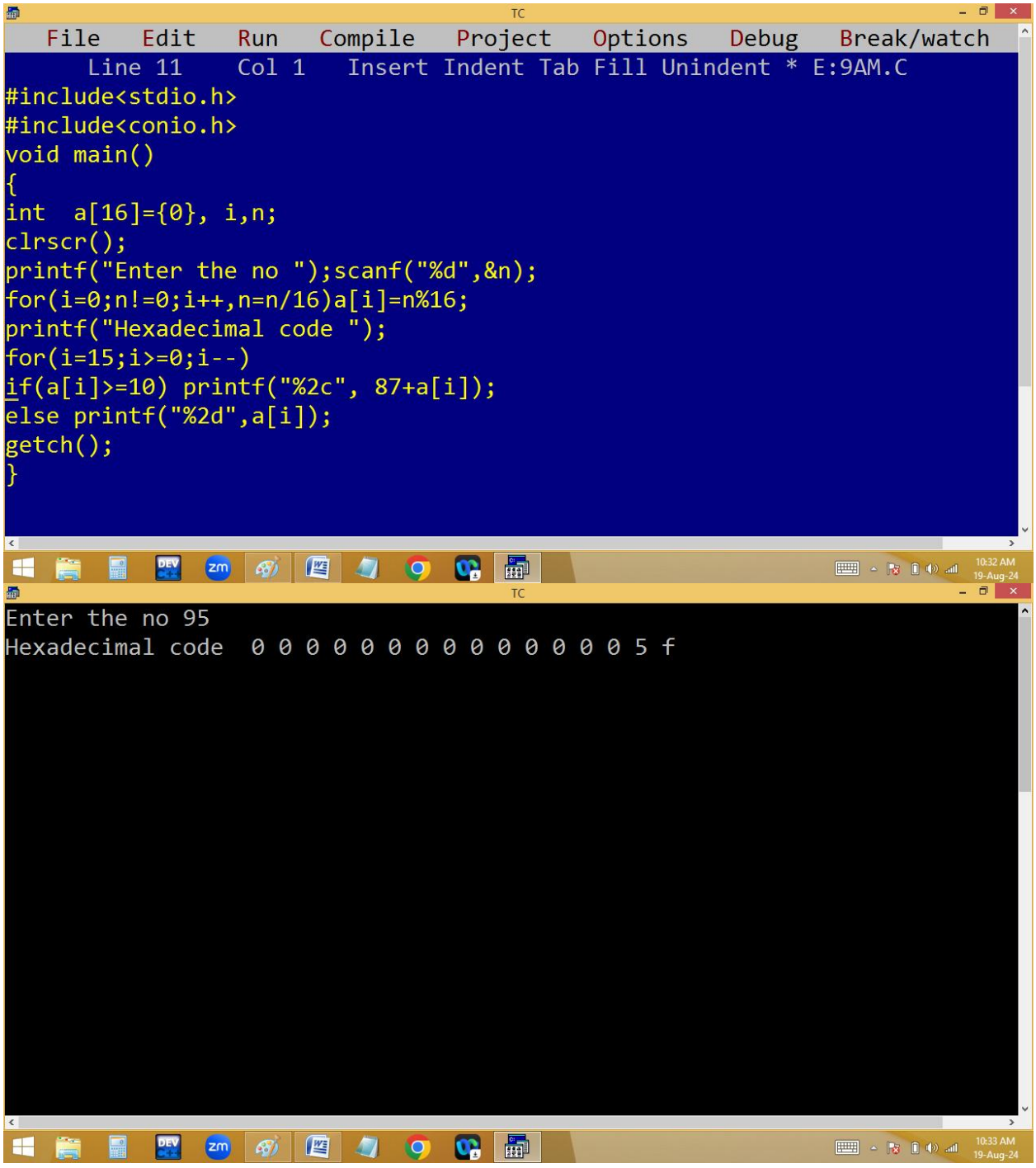
৯ − ৭ ✓

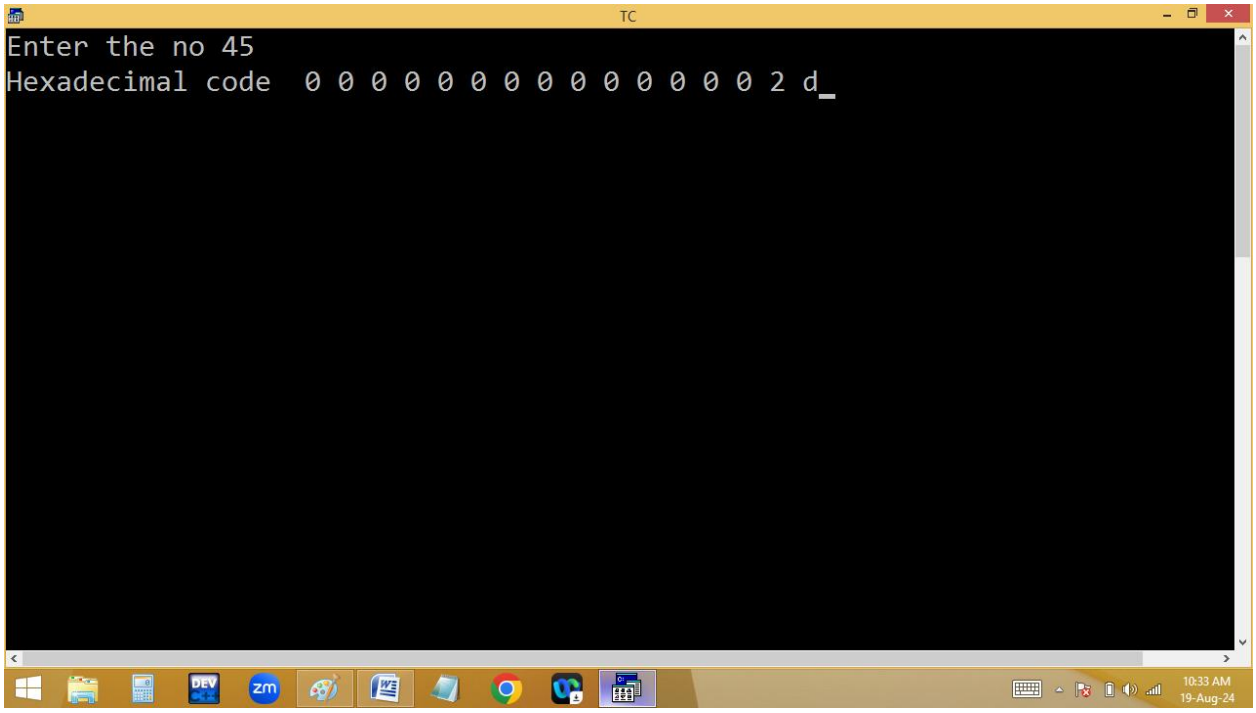


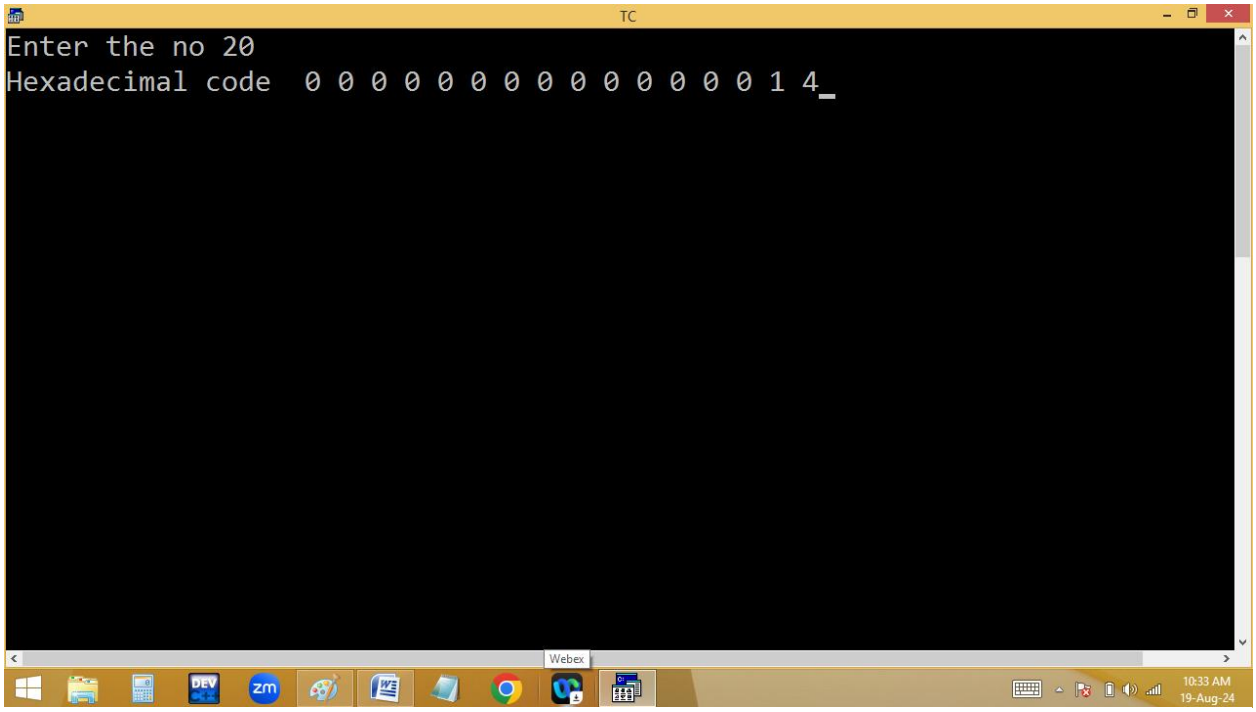
Hexadecimal:

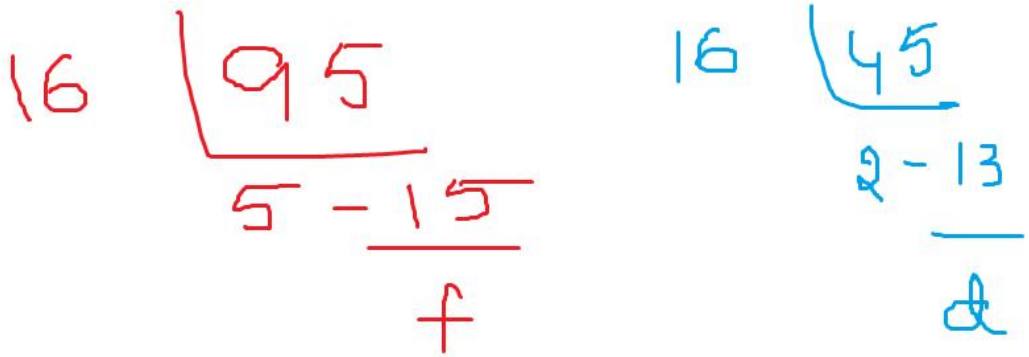
$$16 \overline{)20}$$

$$-4$$


TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 1 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a[16]={0}, i,n;
clrscr();
printf("Enter the no ");scanf("%d",&n);
for(i=0;n!=0;i++,n=n/16)a[i]=n%16;
printf("Hexadecimal code ");
for(i=15;i>=0;i--)
if(a[i]>=10) printf("%2c", 87+a[i]);
else printf("%2d",a[i]);
getch();
}
TC
Enter the no 95
Hexadecimal code 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5 f

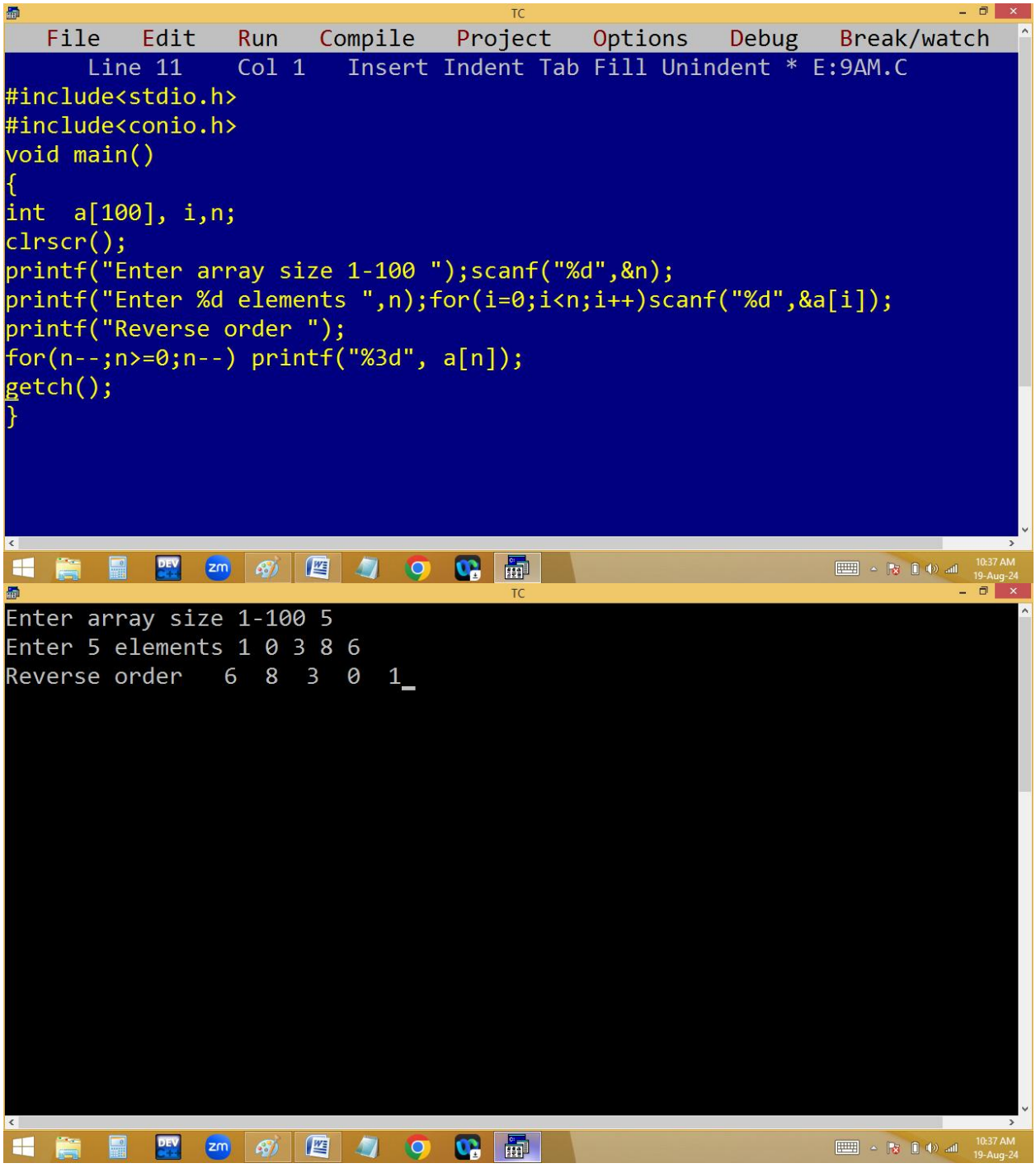

TC
Enter the no 45
Hexadecimal code 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 d
10:33 AM
19-Aug-24



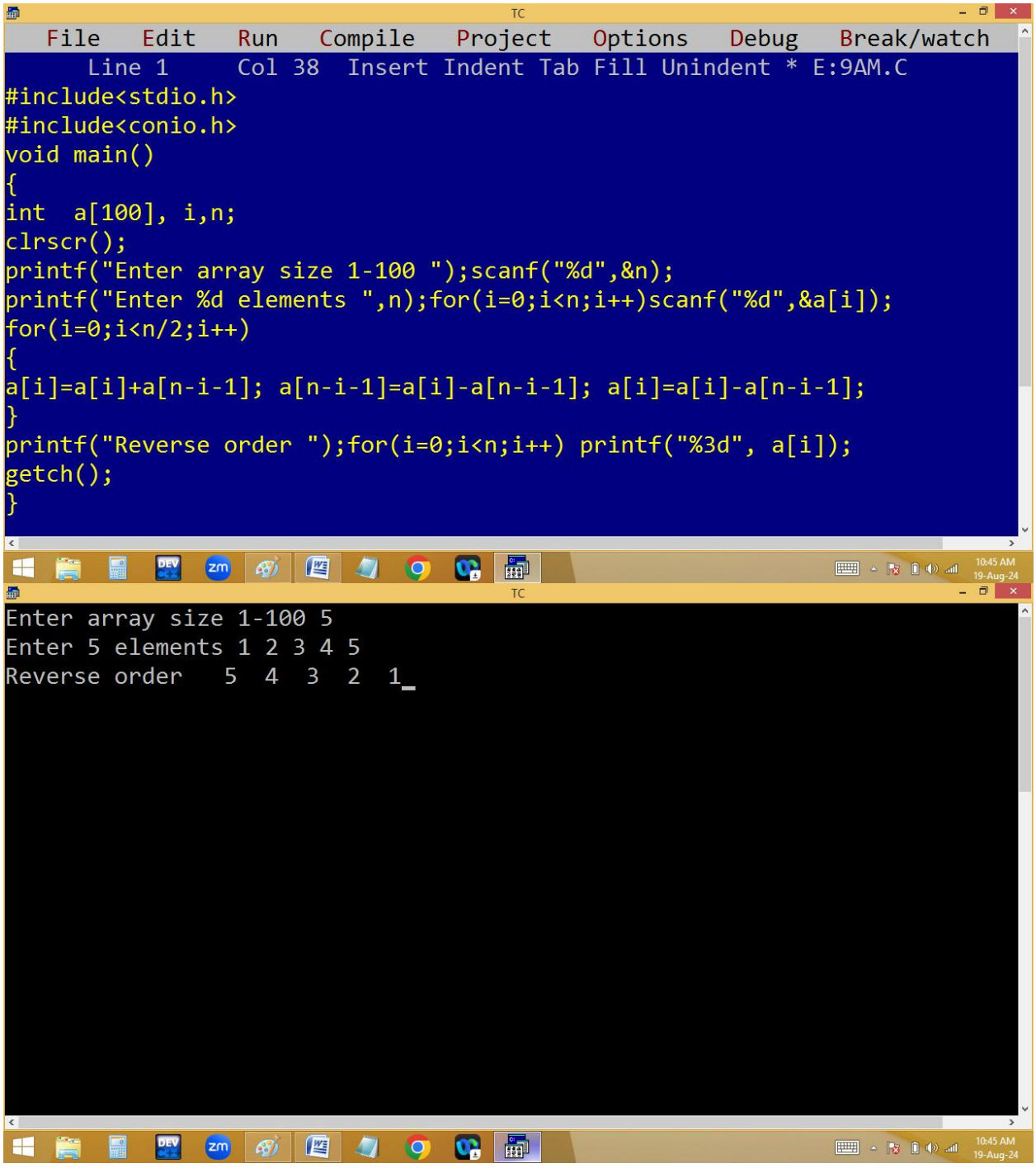


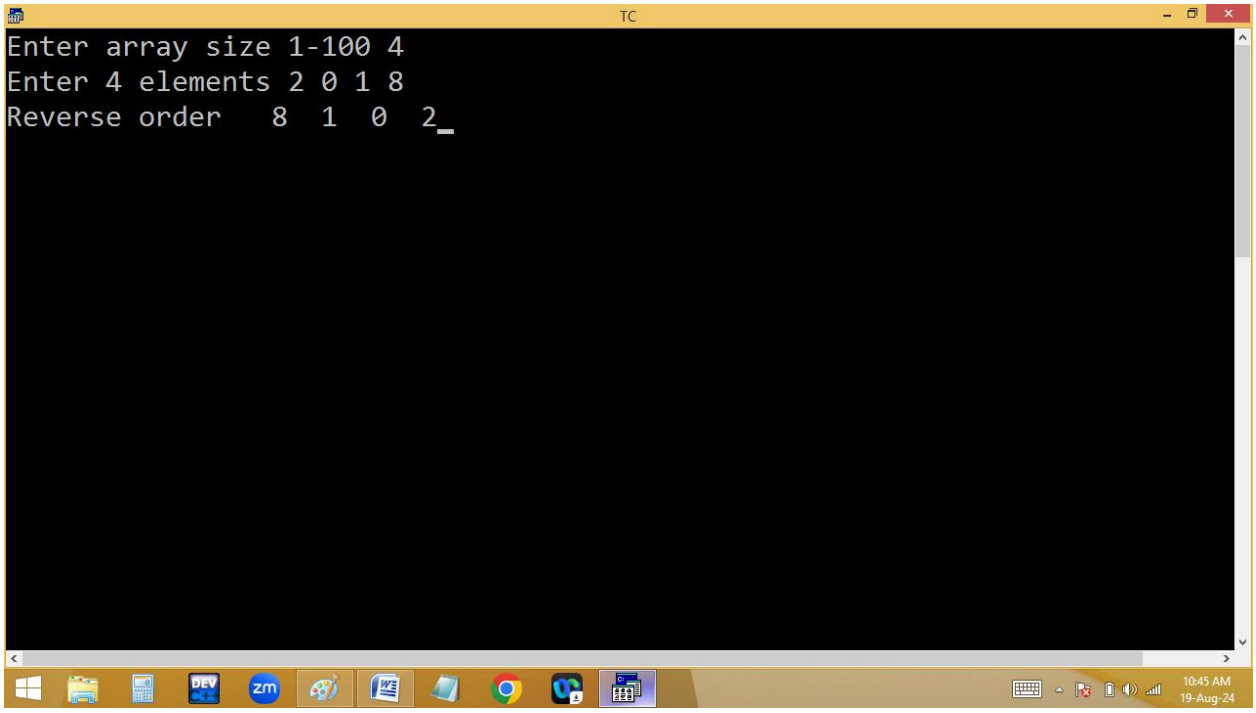
Arranging array elements in reverse order without using 3rd variable:

Method 1 printing in reverse order:


TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 1 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a[100], i,n;
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("Reverse order ");
for(n--;n>=0;n--) printf("%3d", a[n]);
getch();
}
TC
Enter array size 1-100 5
Enter 5 elements 1 0 3 8 6
Reverse order 6 8 3 0 1

Permanent arrangement:


TC
File Edit Run Compile Project Options Debug Break/watch
Line 1 Col 38 Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a[100], i,n;
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/2;i++)
{
a[i]=a[i]+a[n-i-1]; a[n-i-1]=a[i]-a[n-i-1]; a[i]=a[i]-a[n-i-1];
}
printf("Reverse order ");for(i=0;i<n;i++) printf("%3d", a[i]);
getch();
}
TC
Enter array size 1-100 5
Enter 5 elements 1 2 3 4 5
Reverse order 5 4 3 2 1


TC
Enter array size 1-100 4
Enter 4 elements 2 0 1 8
Reverse order 8 1 0 2
10:45 AM
19-Aug-24