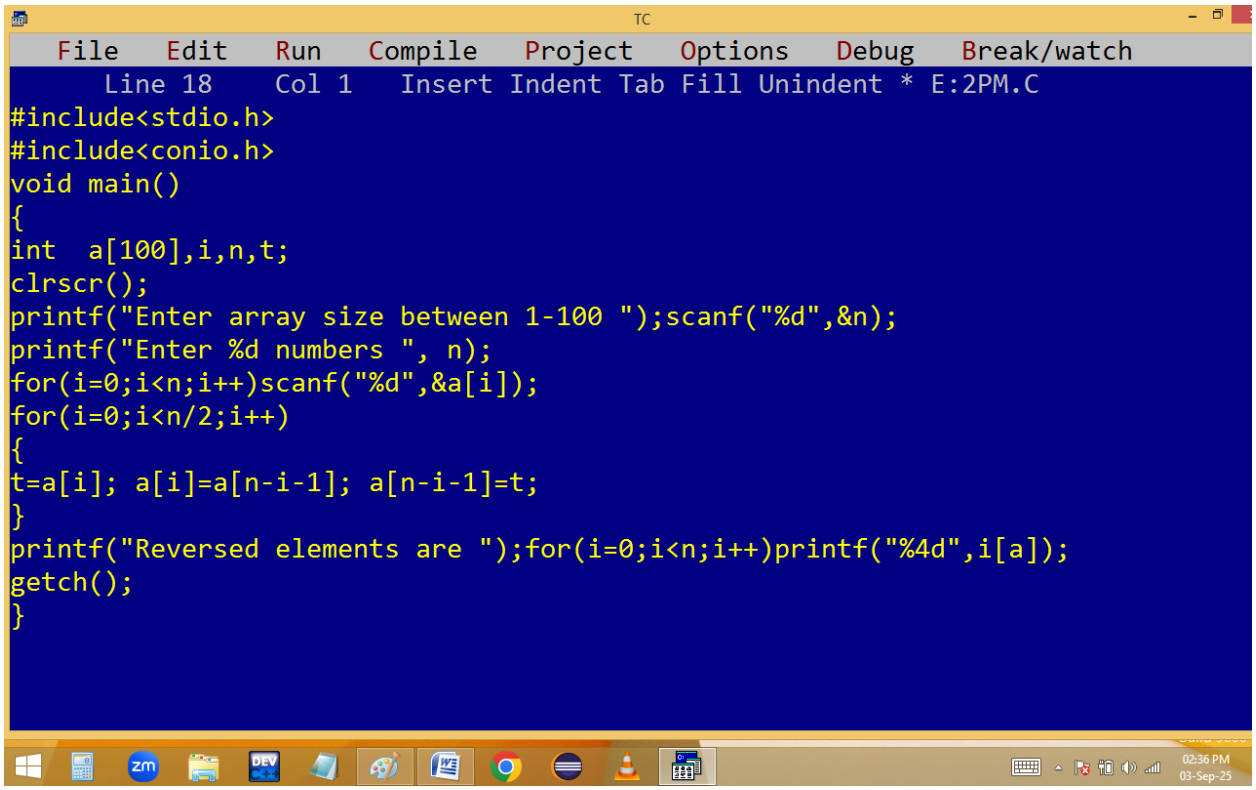
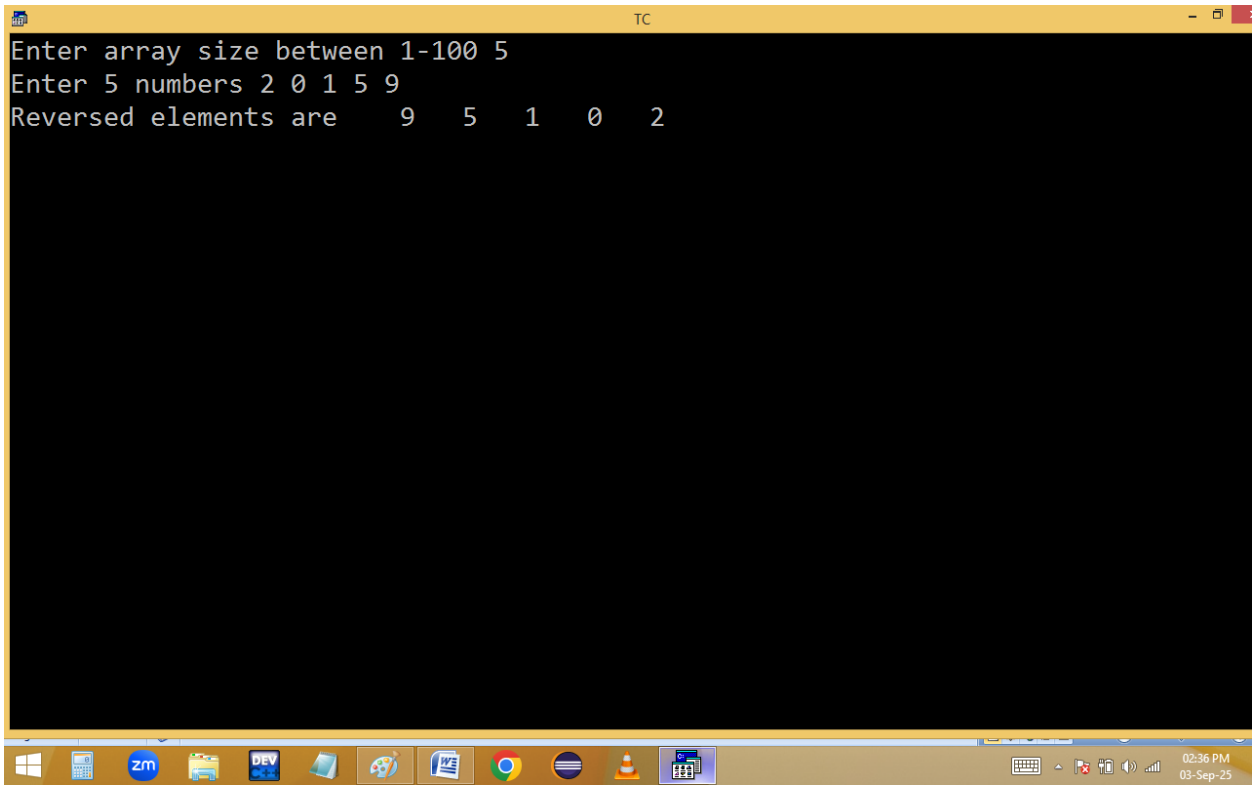
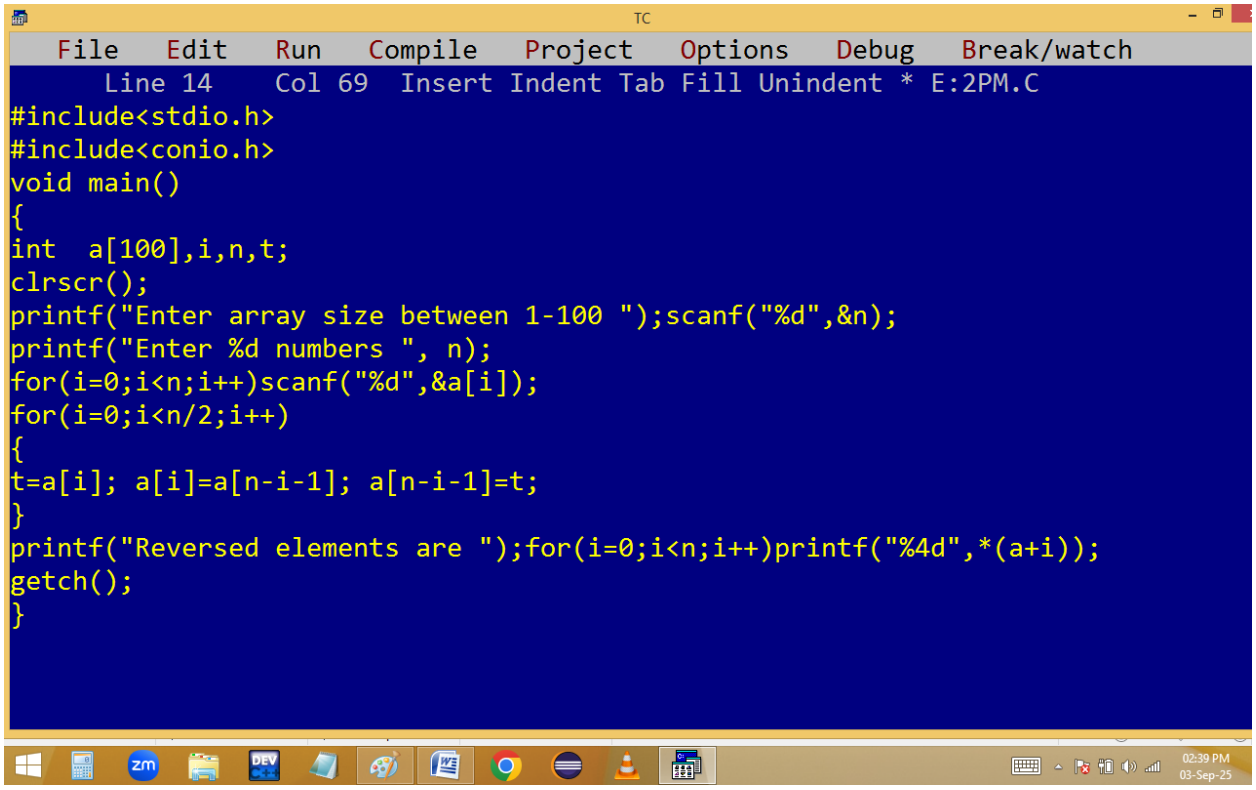
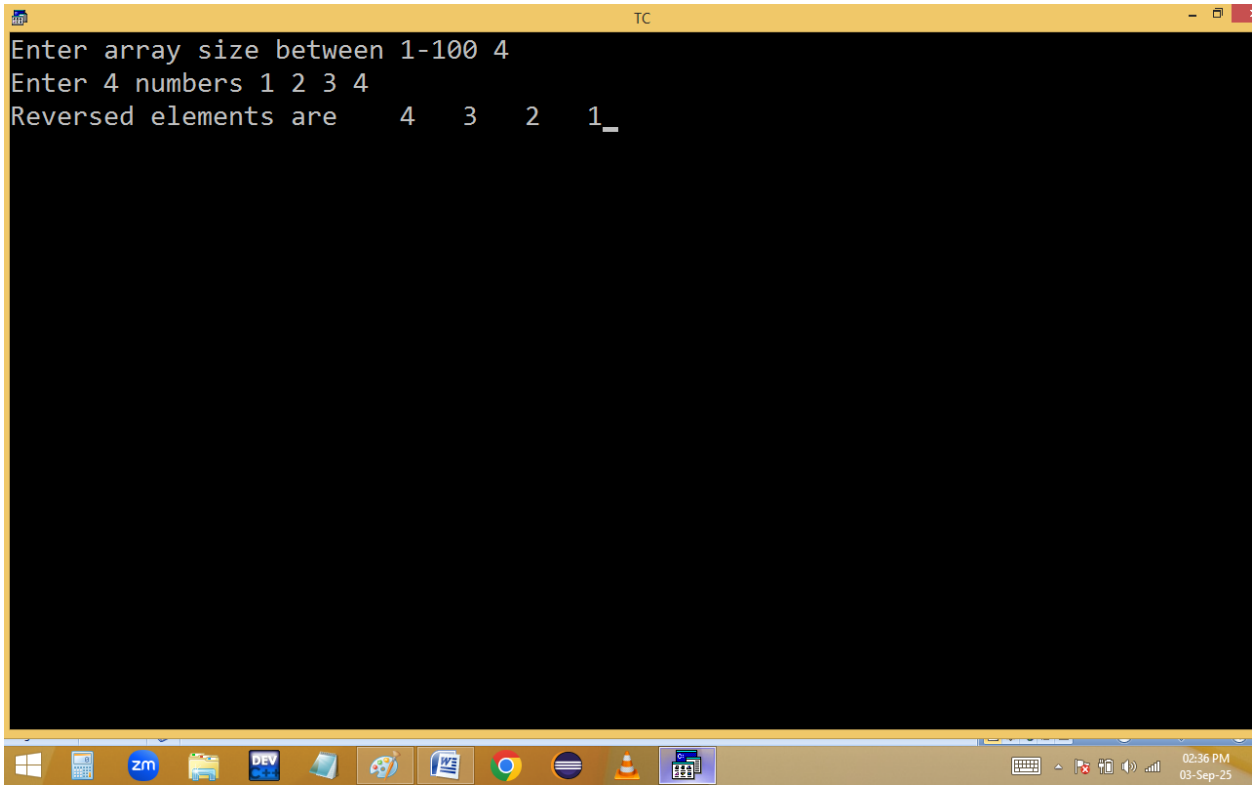
Arrange array elements in reverse order permanently.

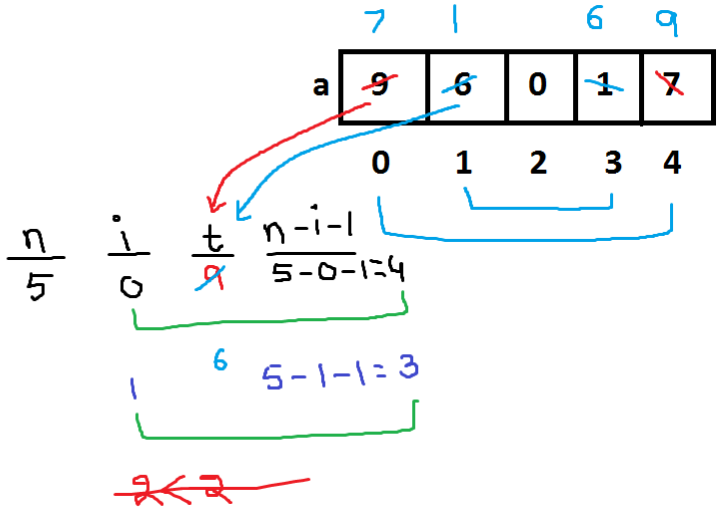


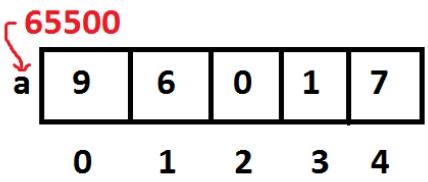

TC
Enter array size between 1-100 5
Enter 5 numbers 2 0 1 5 9
Reversed elements are 9 5 1 0 2

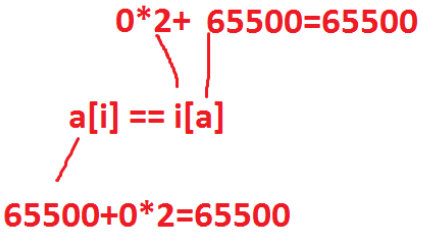

TC
File Edit Run Compile Project Options Debug Break/watch
Line 14 Col 69 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a[100],i,n,t;
clrscr();
printf("Enter array size between 1-100 ");scanf("%d",&n);
printf("Enter %d numbers ", n);
for(i=0;i<n;i++)scanf("%d",&a[i]);
for(i=0;i<n/2;i++)
{
t=a[i]; a[i]=a[n-i-1]; a[n-i-1]=t;
}
printf("Reversed elements are ");for(i=0;i<n;i++)printf("%4d",*(a+i));
getch();
}




```
for(i=0;i<n/2;i++)
{
t=a[i];
a[i]=a[n-i-1];
a[n-i-1]=t;
}
```



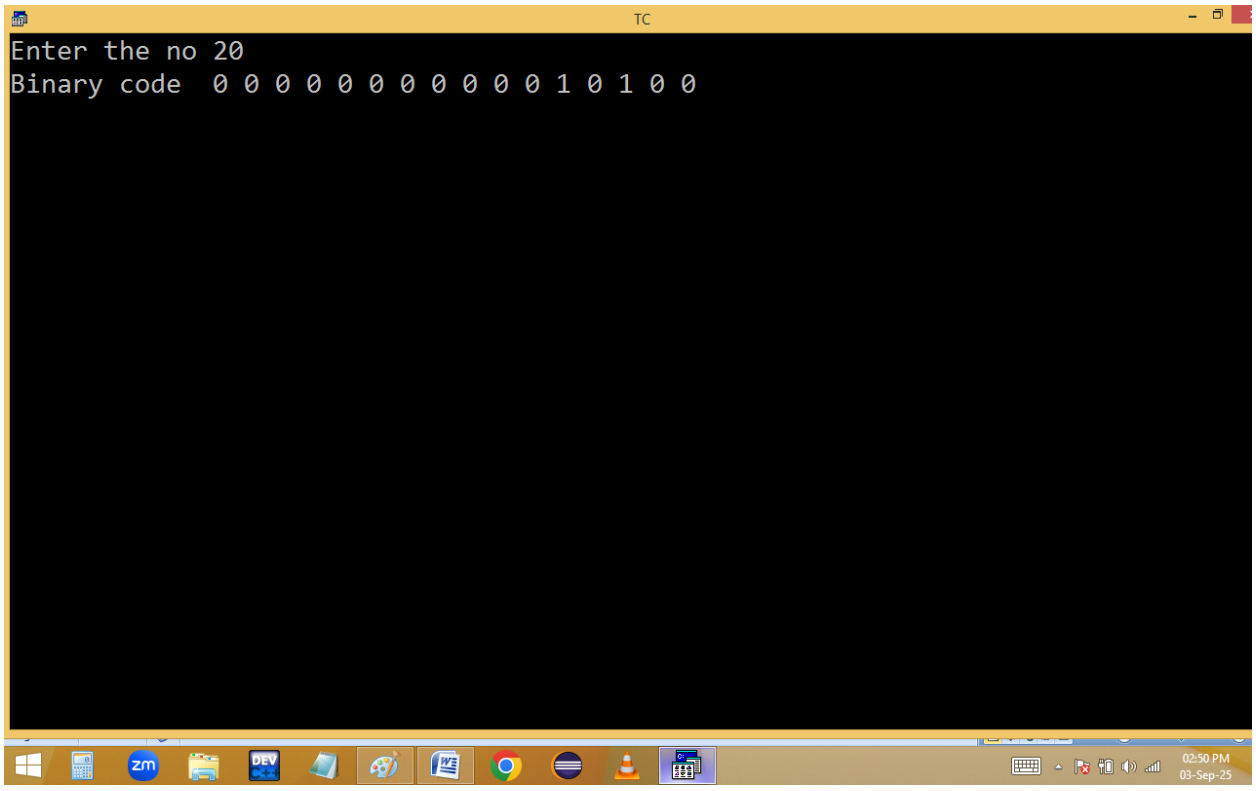


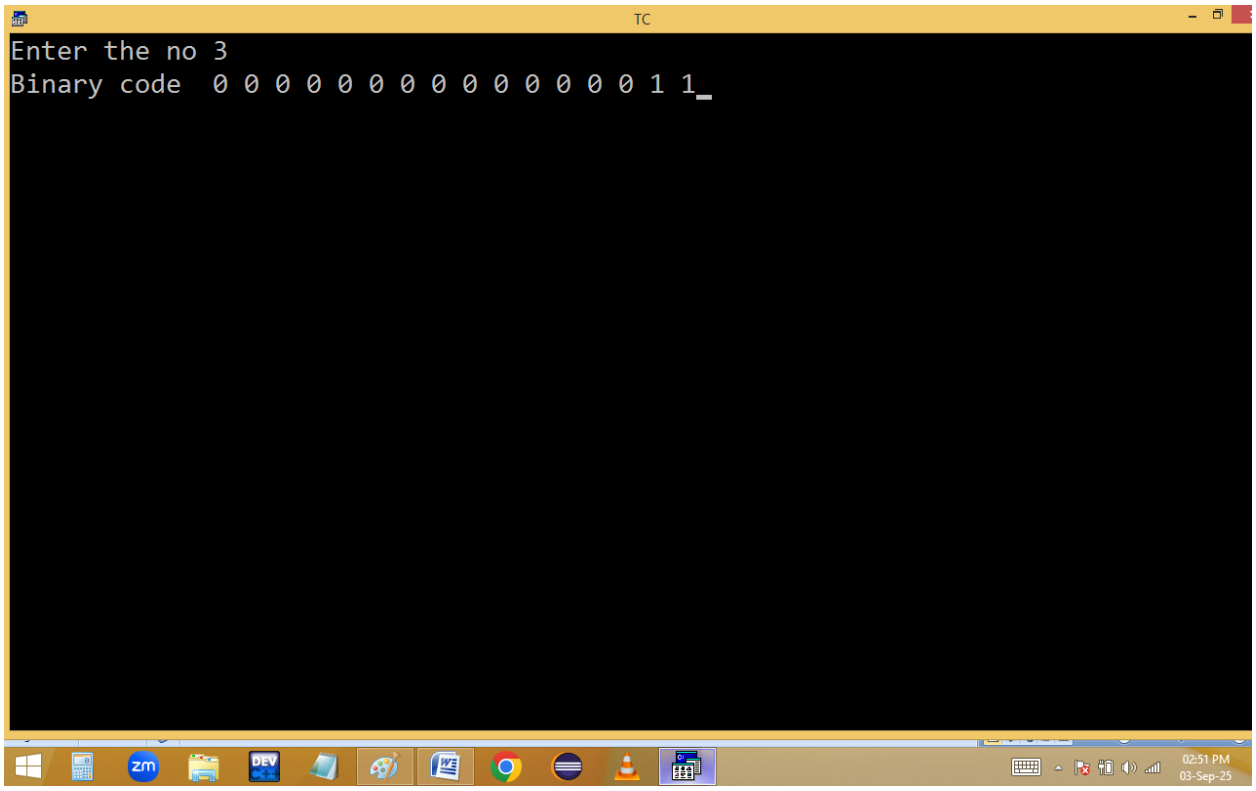


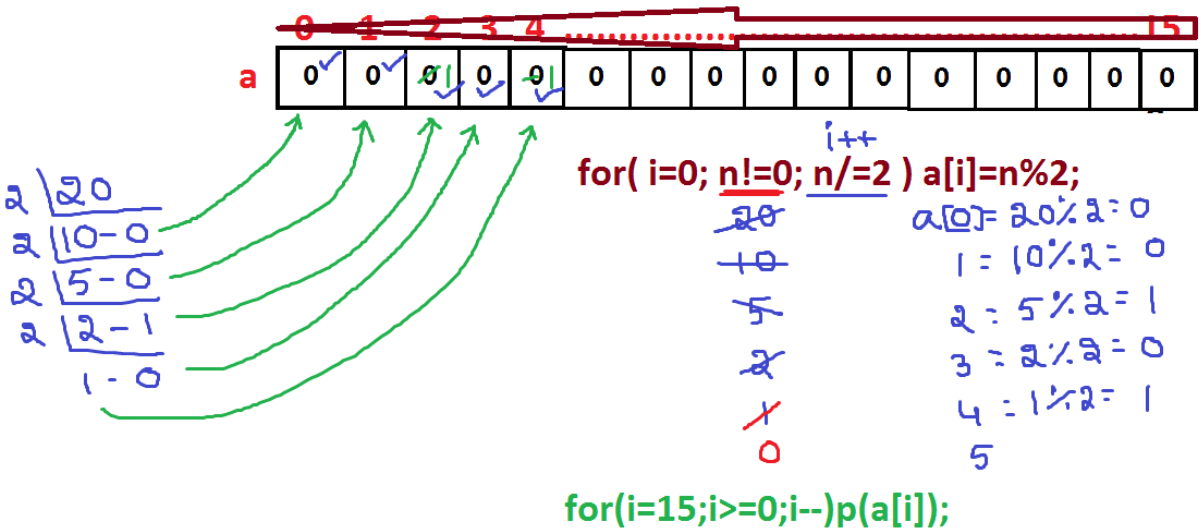
1. Decimal to binary conversion

Eg: **20 ==> 0000 0000 0001 0100**

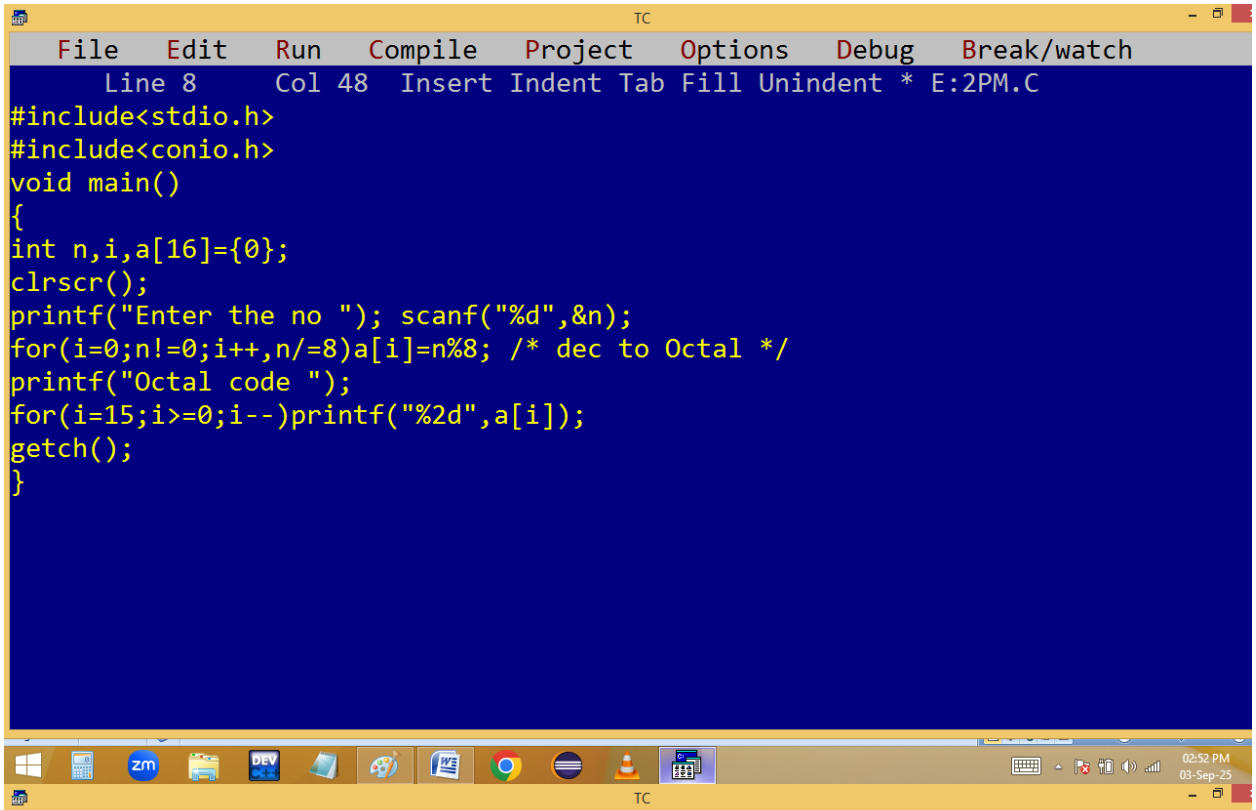
```
TC
File  Edit  Run  Compile  Project  Options  Debug  Break/watch
     Line 10    Col 30  Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,i,a[16]={0};
clrscr();
printf("Enter the no "); scanf("%d",&n);
for(i=0;n!=0;i++,n/=2)a[i]=n%2; /* dec to binary */
printf("Binary code ");
for(i=15;i>=0;i--)printf("%2d",a[i]);
getch();
}
```

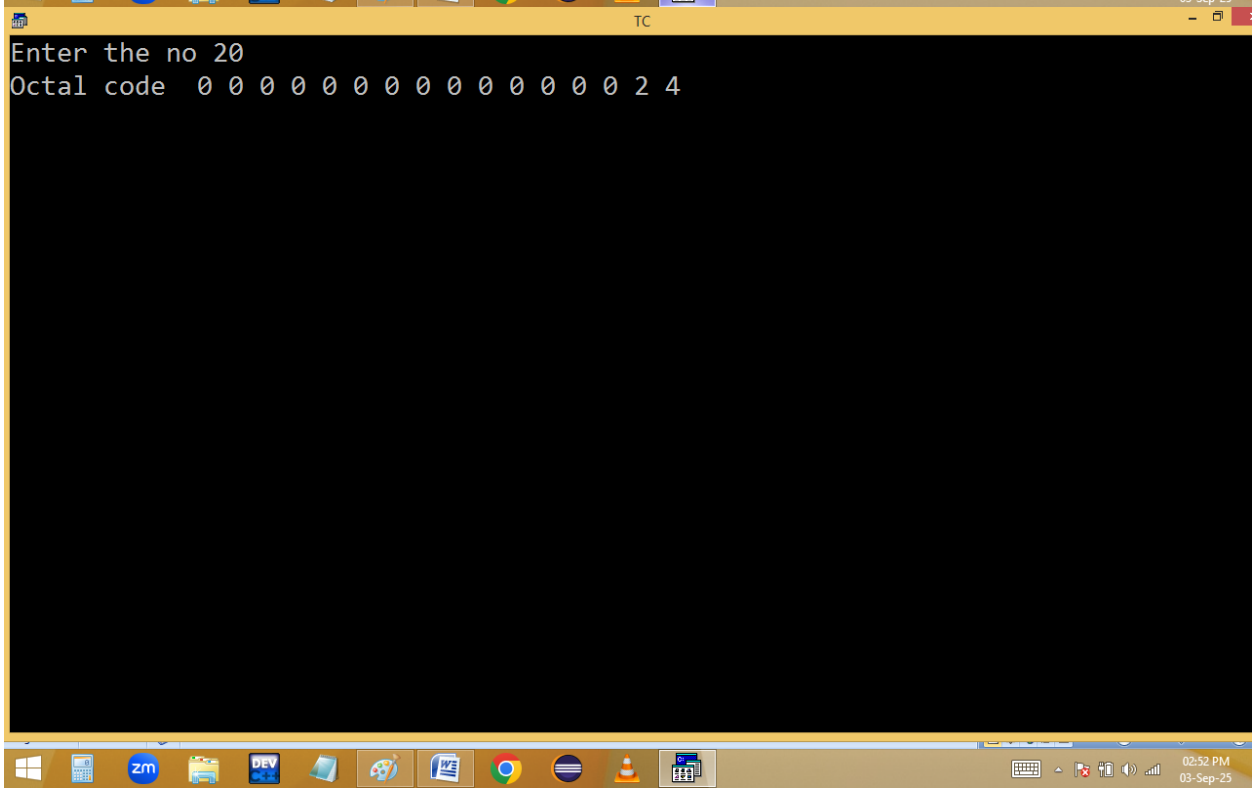

TC
Enter the no 20
Binary code 0 0 0 0 0 0 0 0 0 0 0 1 0 1 0 0
02:50 PM
03-Sep-25


TC
Enter the no 3
Binary code 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1
02:51 PM
03-Sep-25

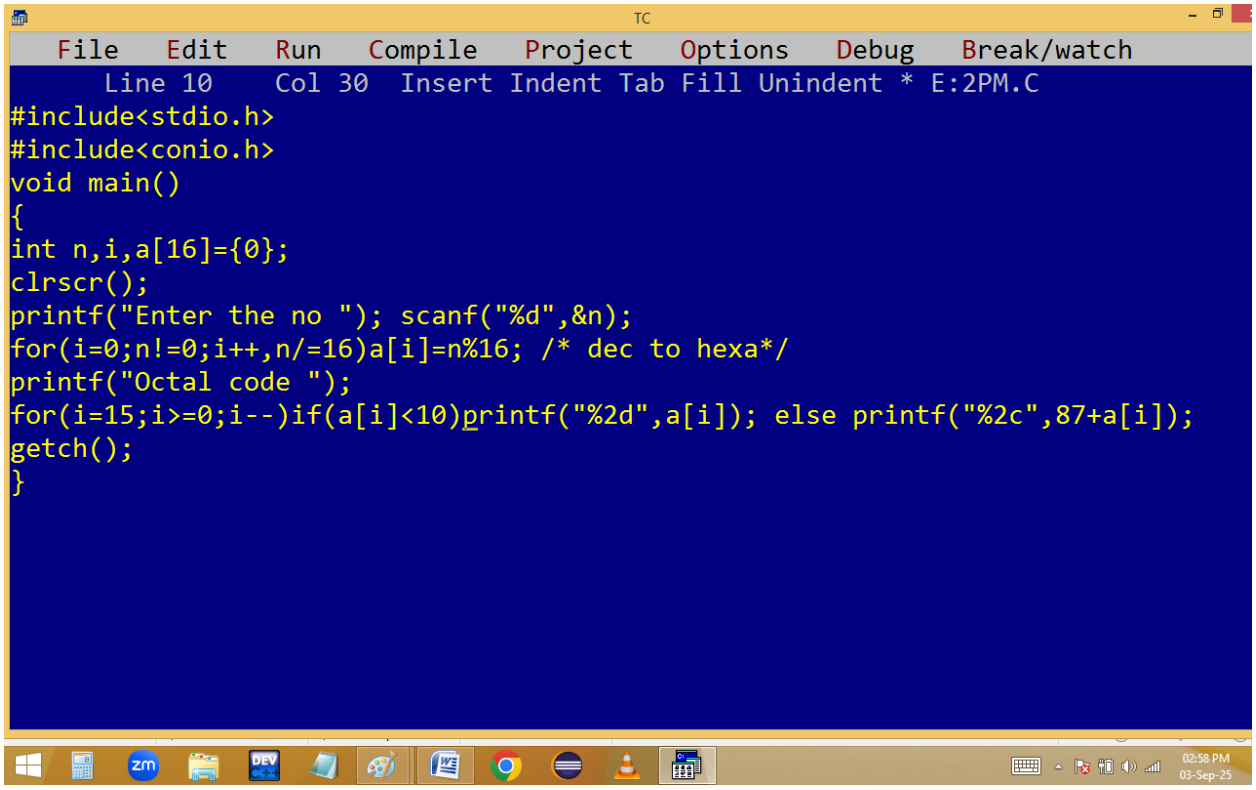


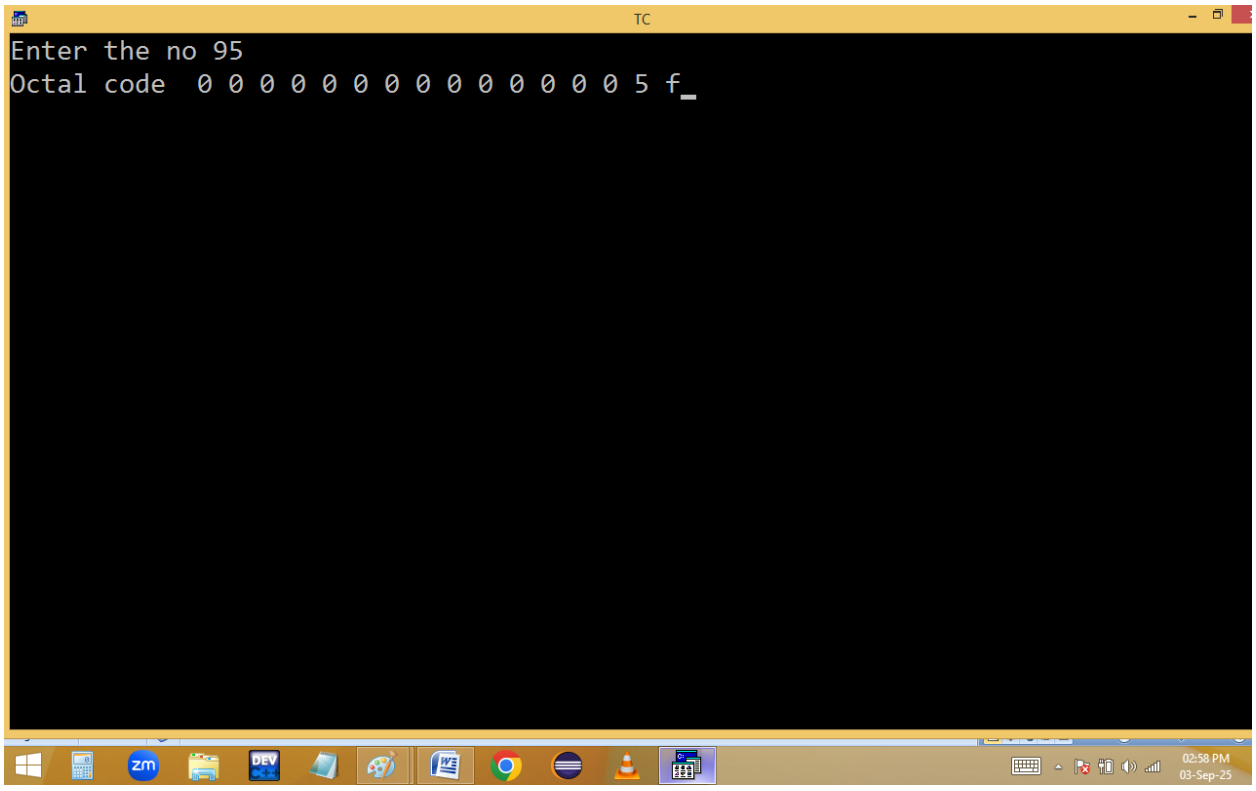
decimal to octal:

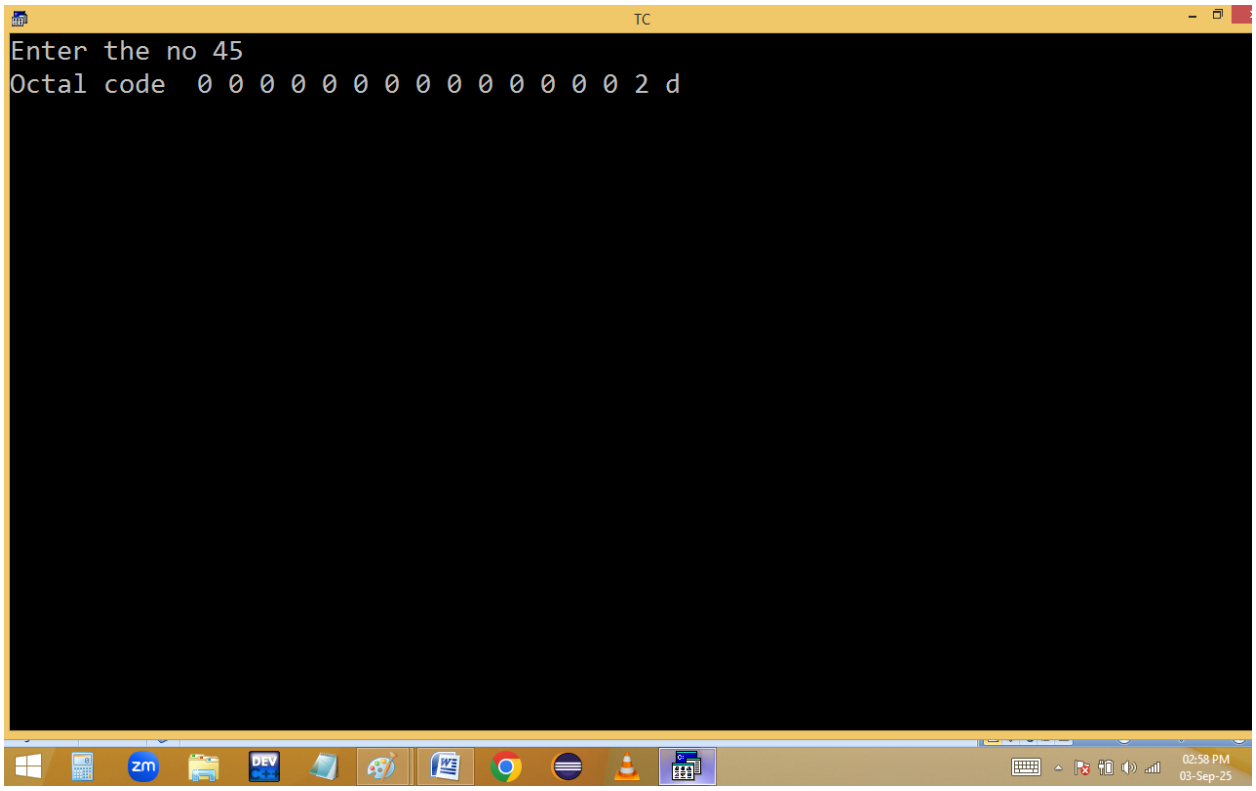

TC
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 48 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,i,a[16]={0};
clrscr();
printf("Enter the no "); scanf("%d",&n);
for(i=0;n!=0;i++,n/=8)a[i]=n%8; /* dec to Octal */
printf("Octal code ");
for(i=15;i>=0;i--)printf("%2d",a[i]);
getch();
}

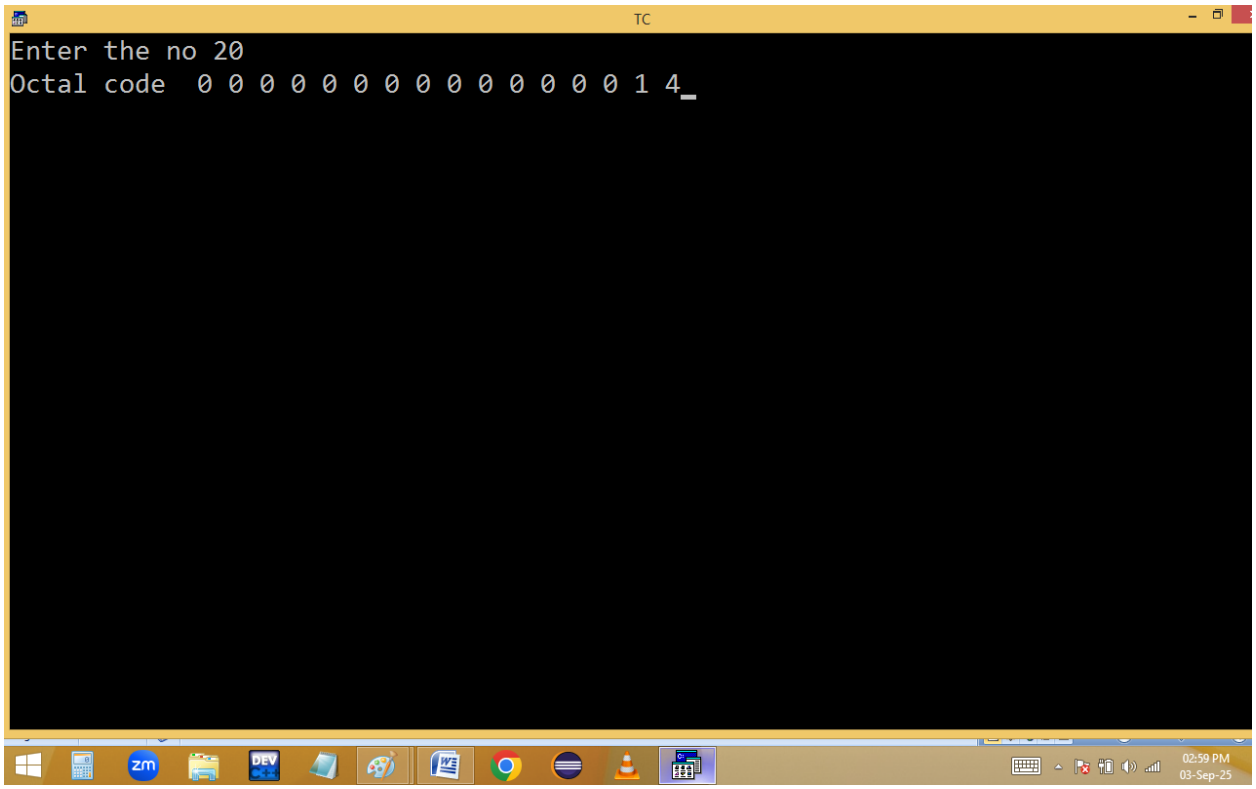

TC
Enter the no 20
Octal code 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 4

Decimal to hexa:




TC
Enter the no 95
Octal code 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5 f
02:58 PM
03-Sep-25


TC
Enter the no 45
Octal code 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 d
02:58 PM
03-Sep-25



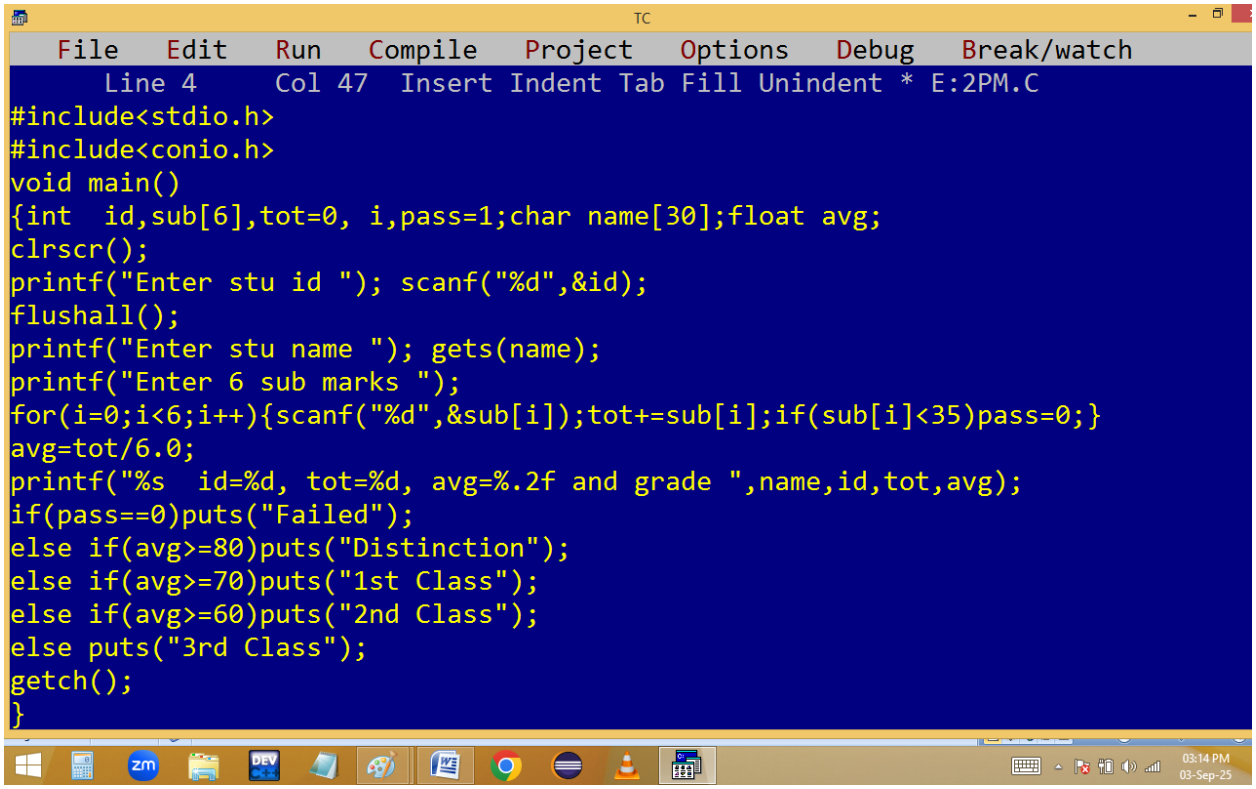
16 | 45
2 - 13
d

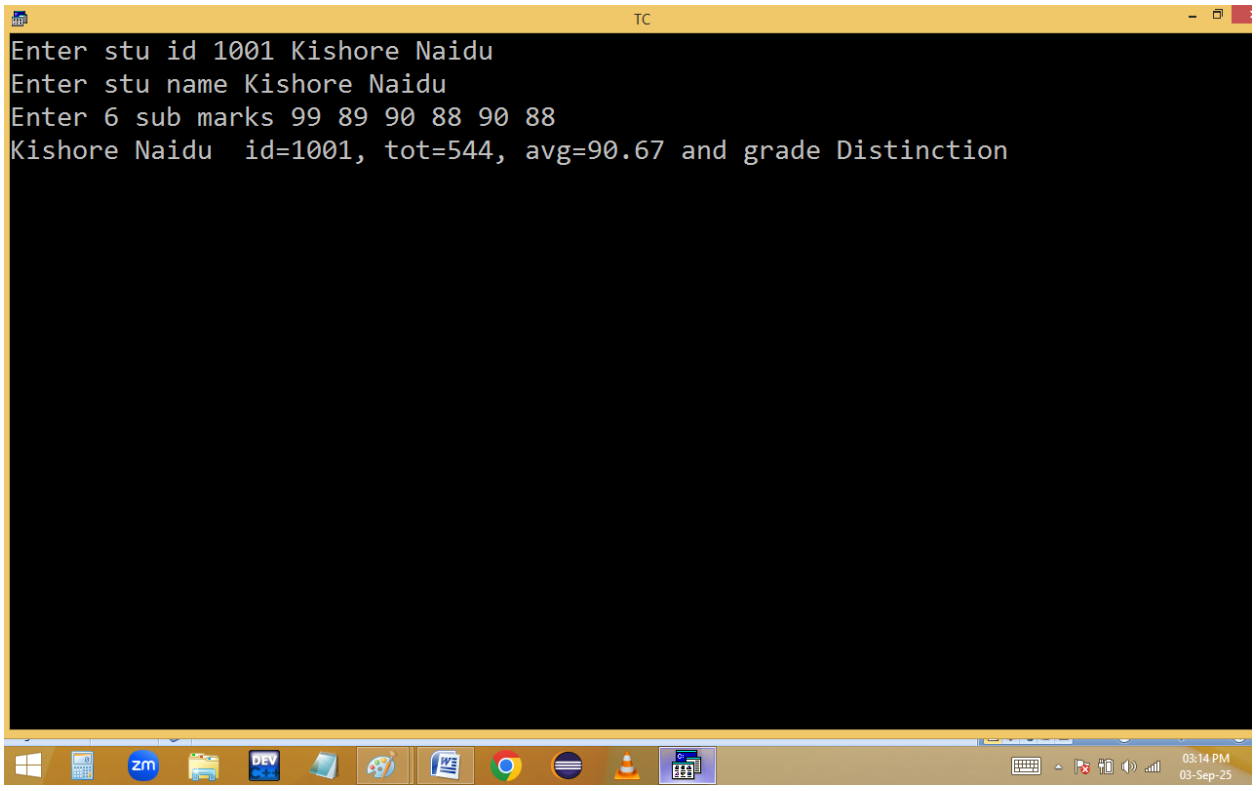
16 | 20
1 - 4 ✓

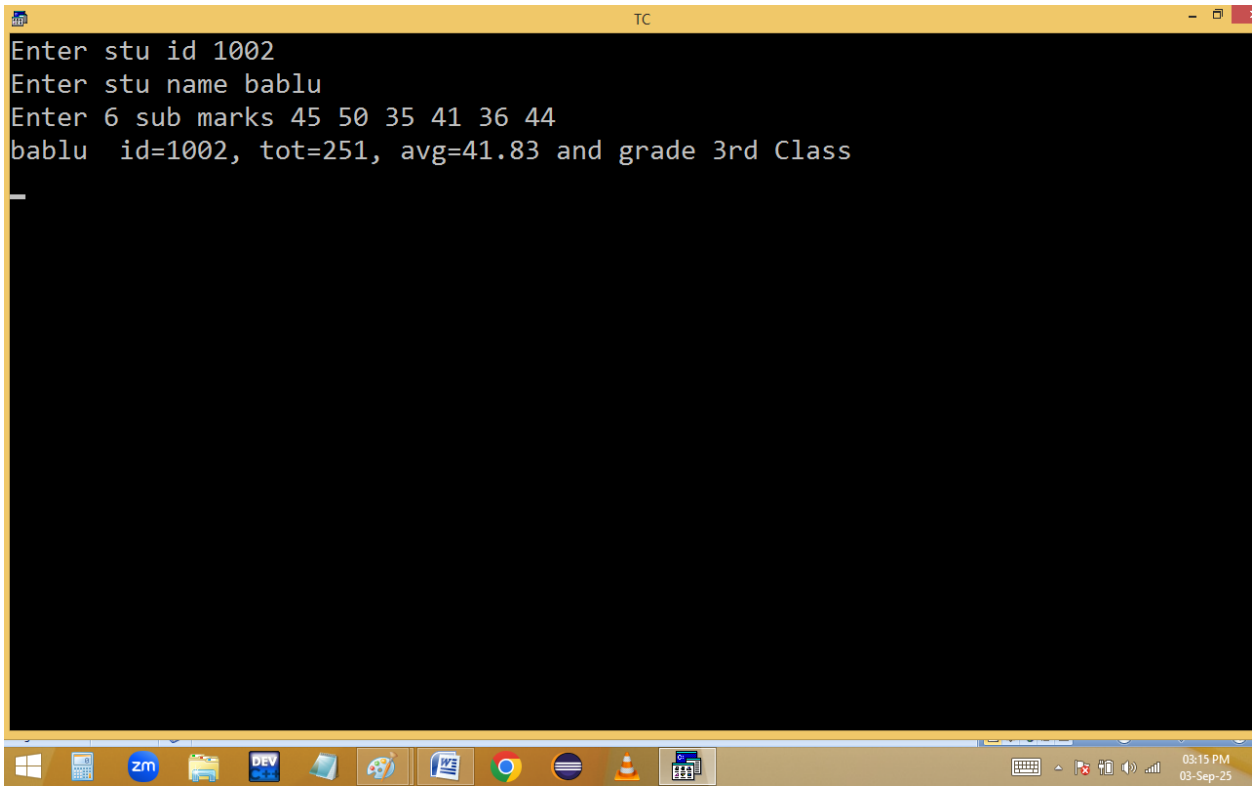
16 | 95
5 - 15
f

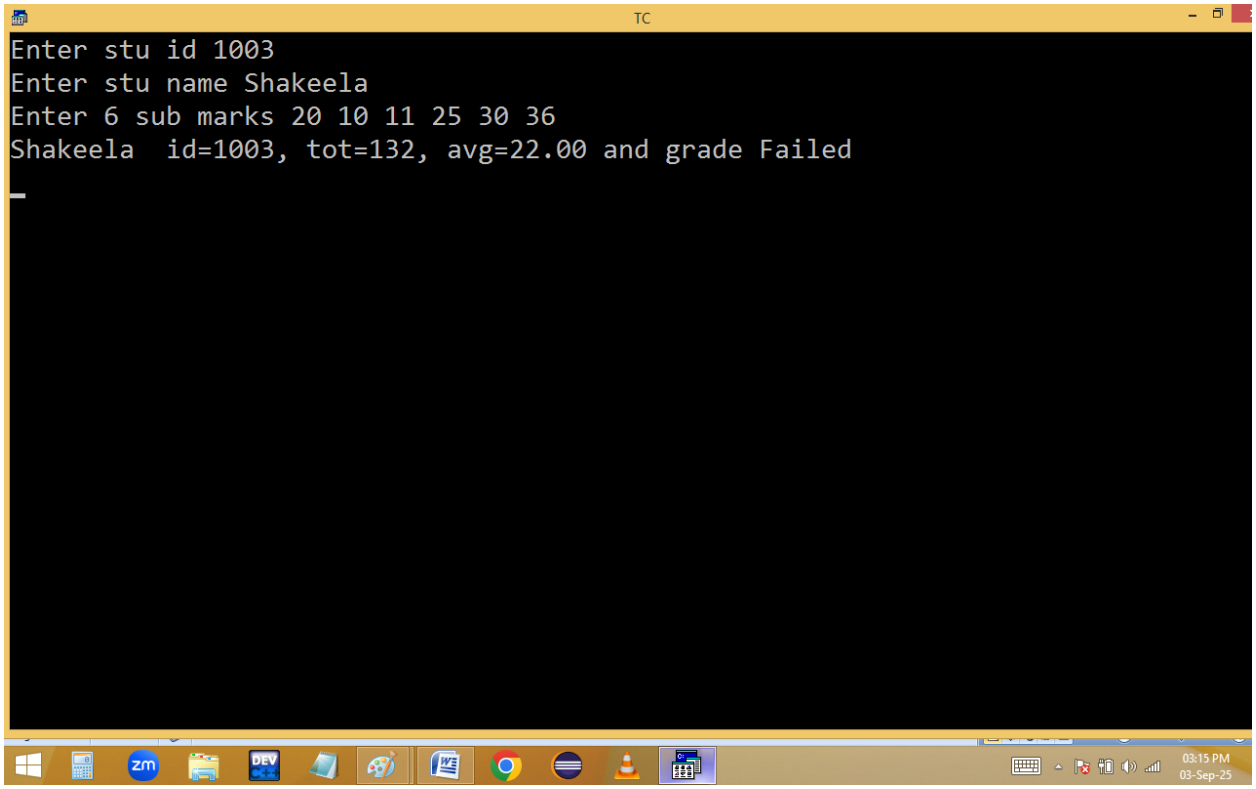
Read a stu id, name, 6 sub marks using array. Find total, average and grade using below table.

Avg	Grade
>=80	Distinction
>=60	1st class
>=50	2nd class
>=35	3rd class
<35	Fail

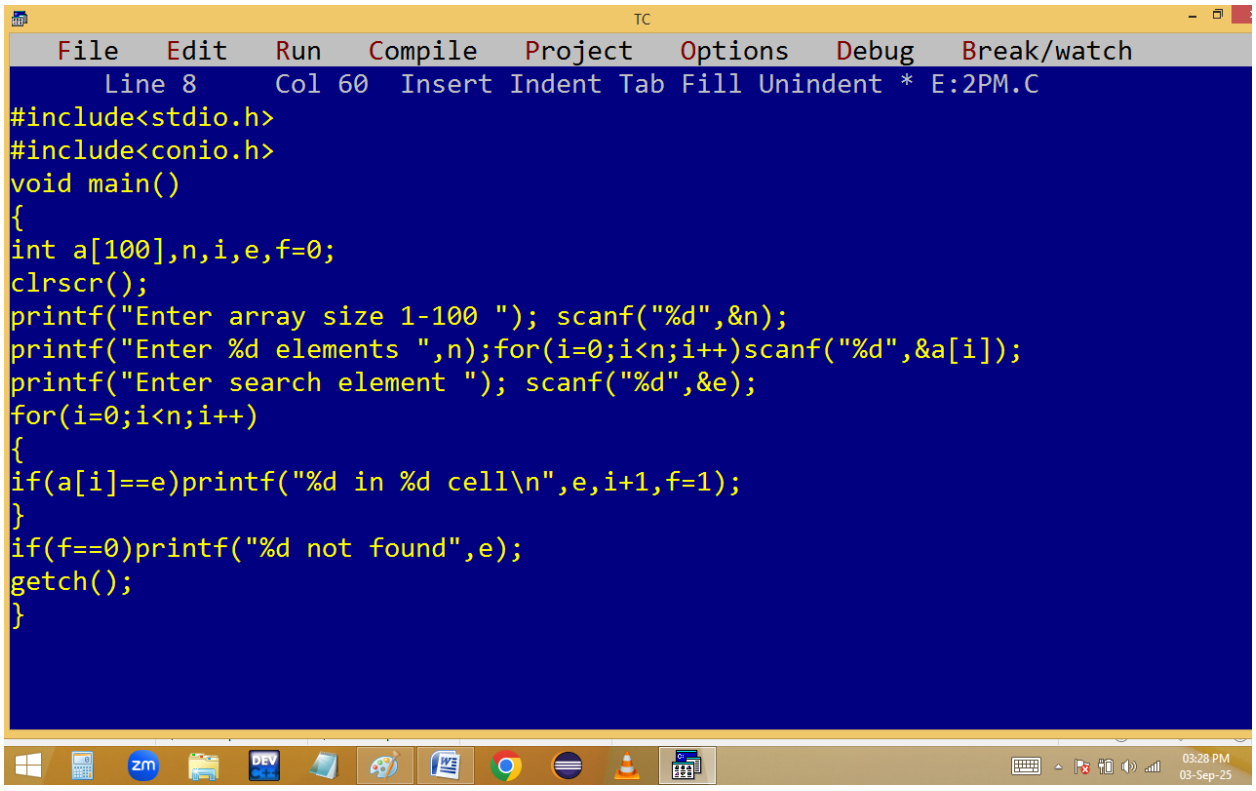


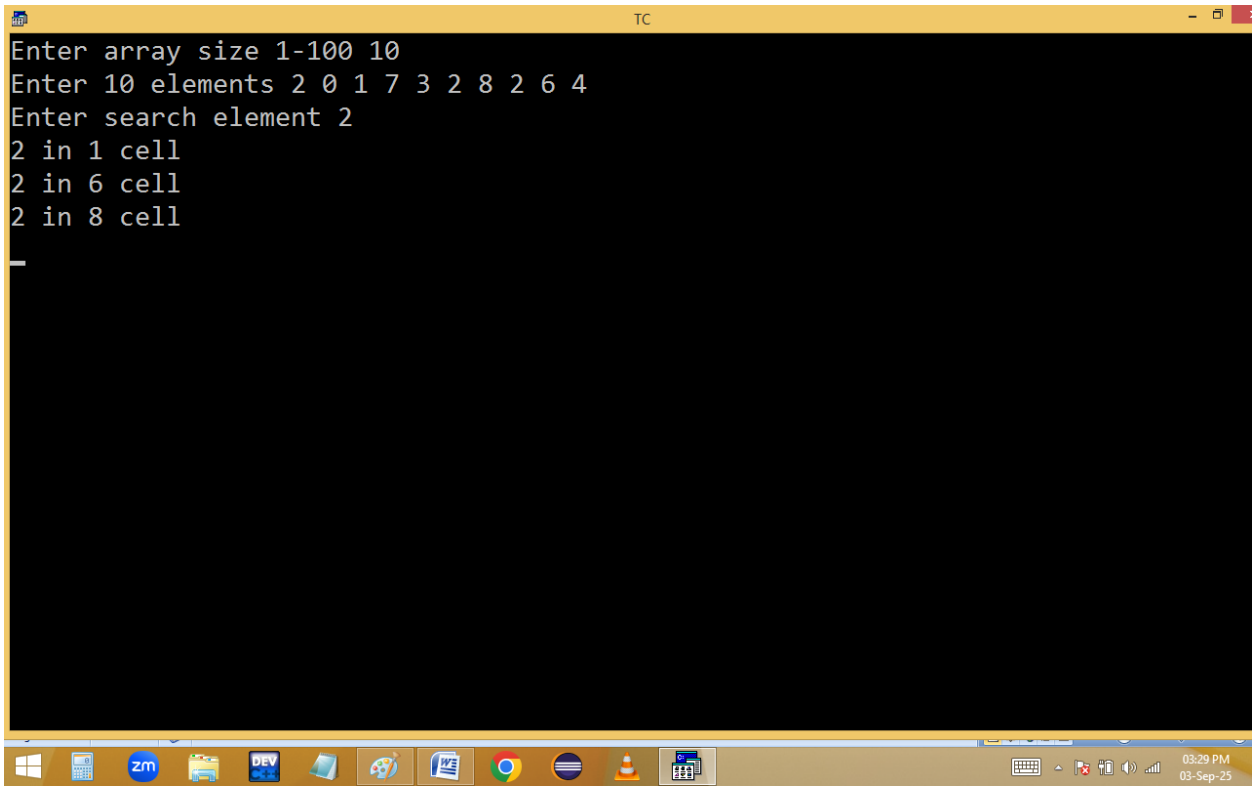

TC
Enter stu id 1001 Kishore Naidu
Enter stu name Kishore Naidu
Enter 6 sub marks 99 89 90 88 90 88
Kishore Naidu id=1001, tot=544, avg=90.67 and grade Distinction

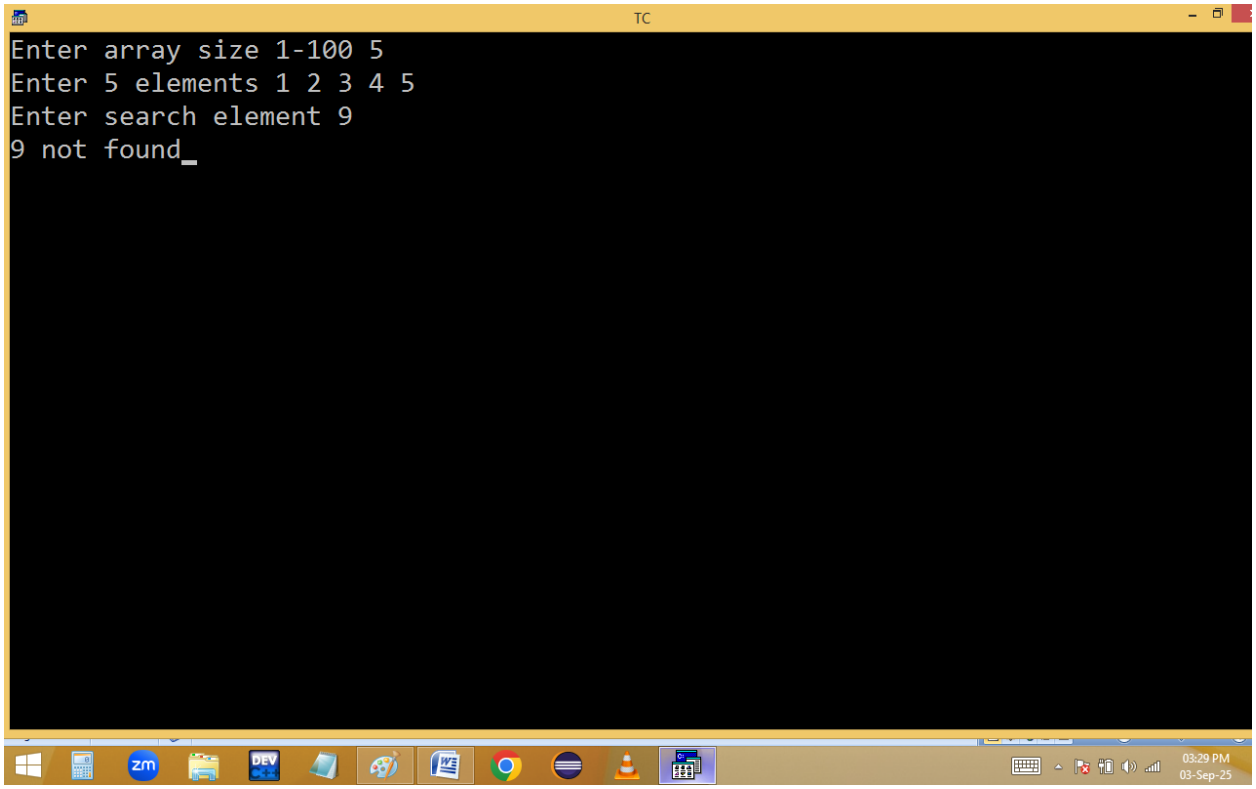

TC
Enter stu id 1002
Enter stu name bablu
Enter 6 sub marks 45 50 35 41 36 44
bablu id=1002, tot=251, avg=41.83 and grade 3rd Class



Linear search:


TC
File Edit Run Compile Project Options Debug Break/watch
Line 8 Col 60 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int a[100],n,i,e,f=0;
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 search element "); scanf("%d",&e);
for(i=0;i<n;i++)
{
if(a[i]==e)printf("%d in %d cell\n",e,i+1,f=1);
}
if(f==0)printf("%d not found",e);
getch();
}


TC
Enter array size 1-100 10
Enter 10 elements 2 0 1 7 3 2 8 2 6 4
Enter search element 2
2 in 1 cell
2 in 6 cell
2 in 8 cell



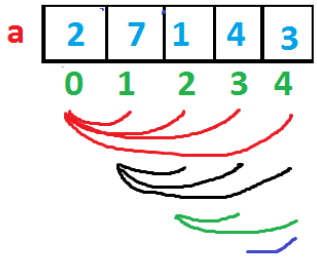
a	2	7	10	4	1
	0	1	2	3	4

```
for( i=0; i<5;i++ )
{
if(a[i]==e)
{
p("%d in %d cell\n",e,i+1,f=1);
}
}
if(f==0)p("ele not found");
```

n	e	i	f
5	10	0	0
		1	
		2+1=3	

20

Selection sort:



2	7	1	4	3	L	R
1	7	2	4	3	i	j
1	2	7	4	3	0	1, 2, 3, 4
1	2	4	7	3	1	2, 3, 4
1	2	3	7	4	2	3, 4
1	2	3	4	7	3	4