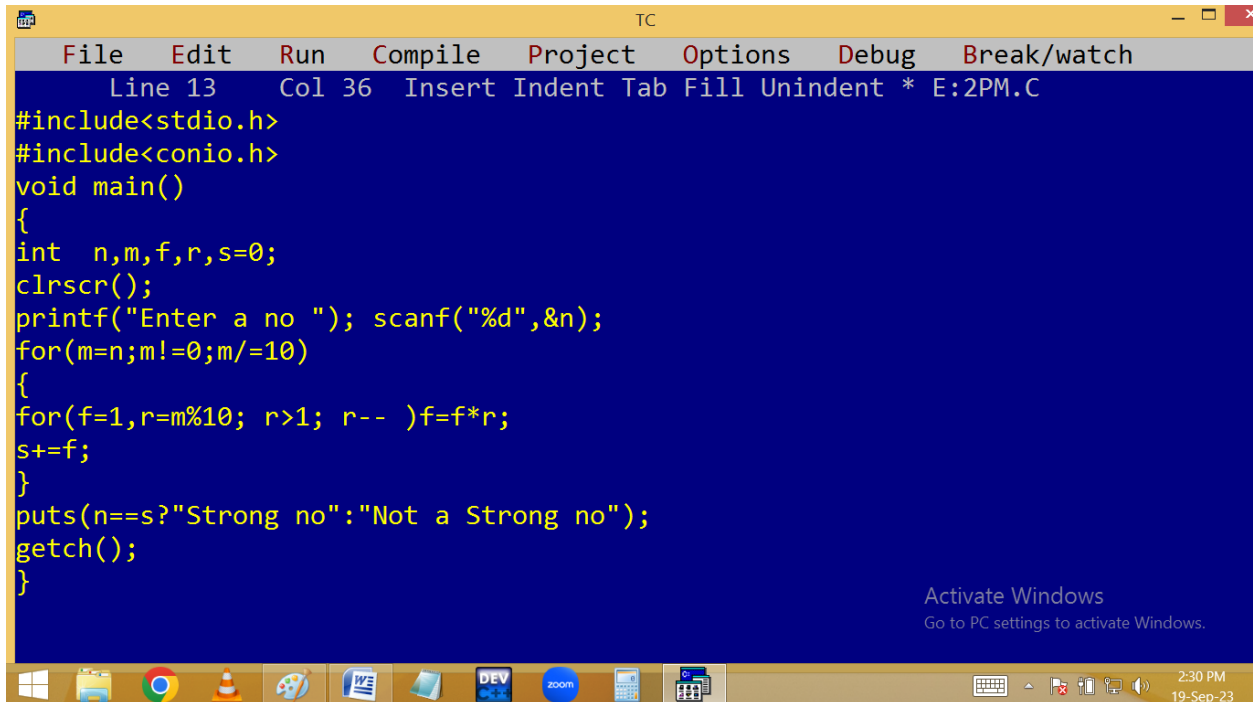


Finding strong no or not.

1 factorial is 1

2 factorial 2

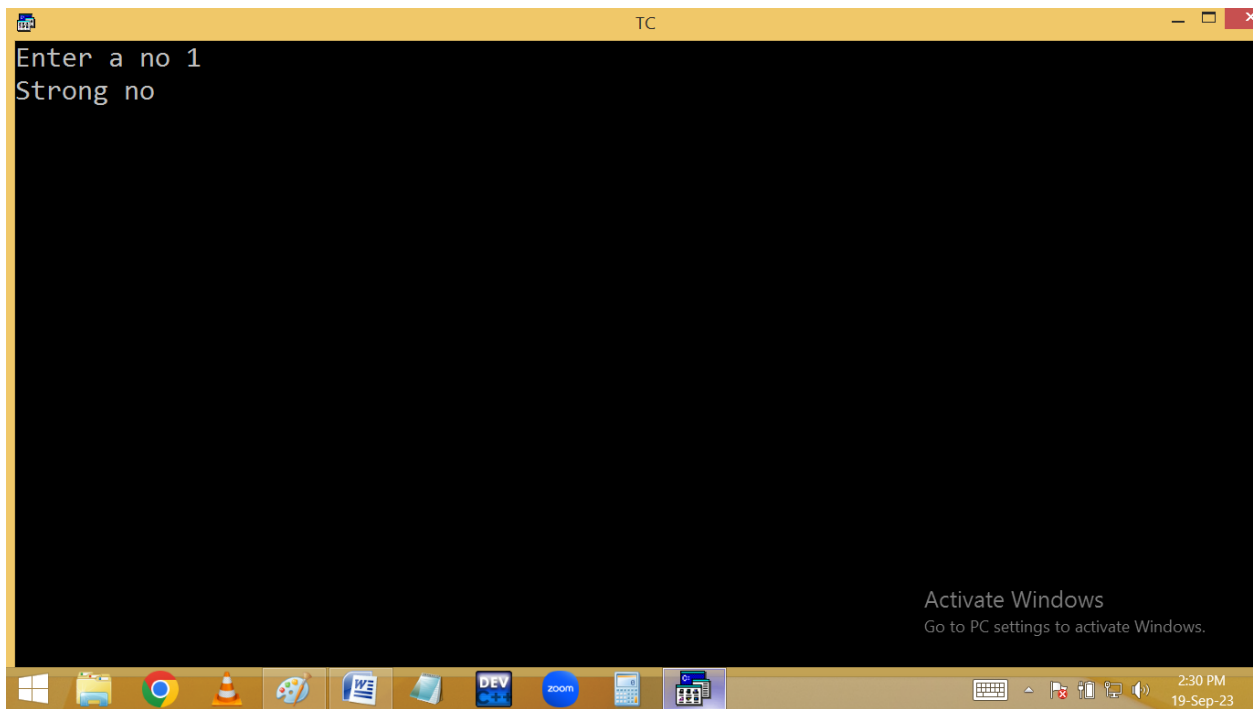
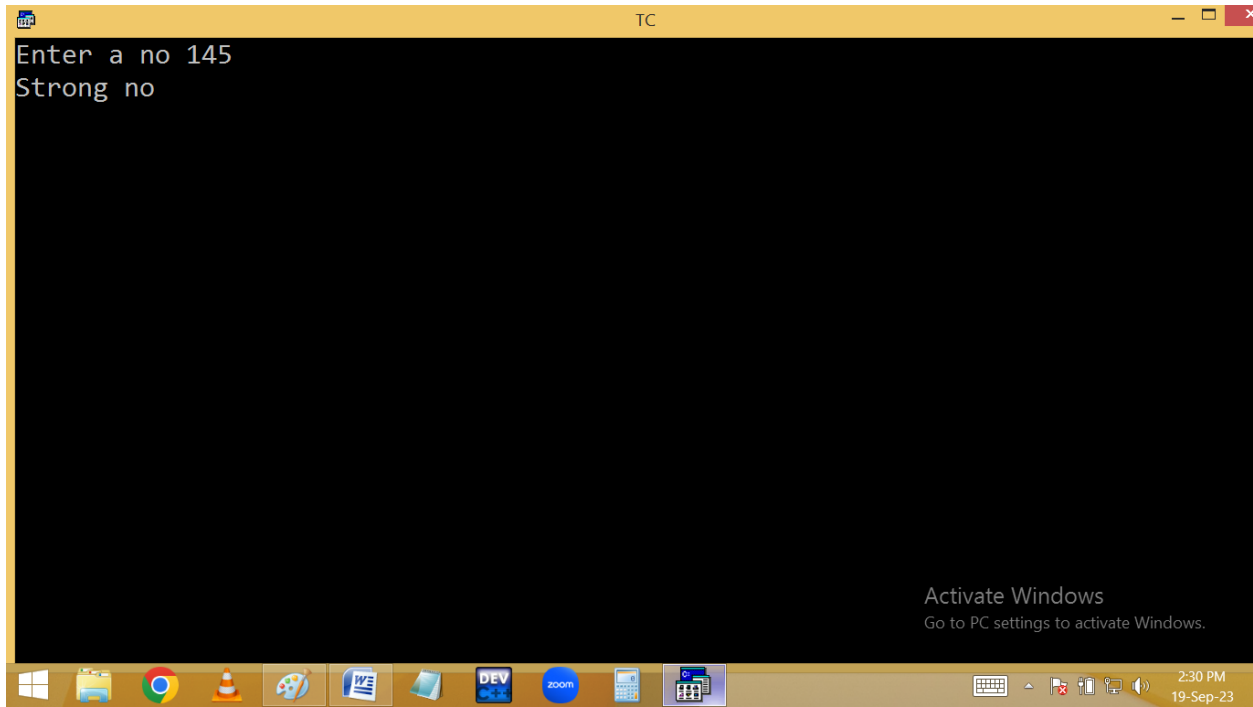
145 $\rightarrow 1! + 4! + 5! = 1 + 24 + 120 = 145$

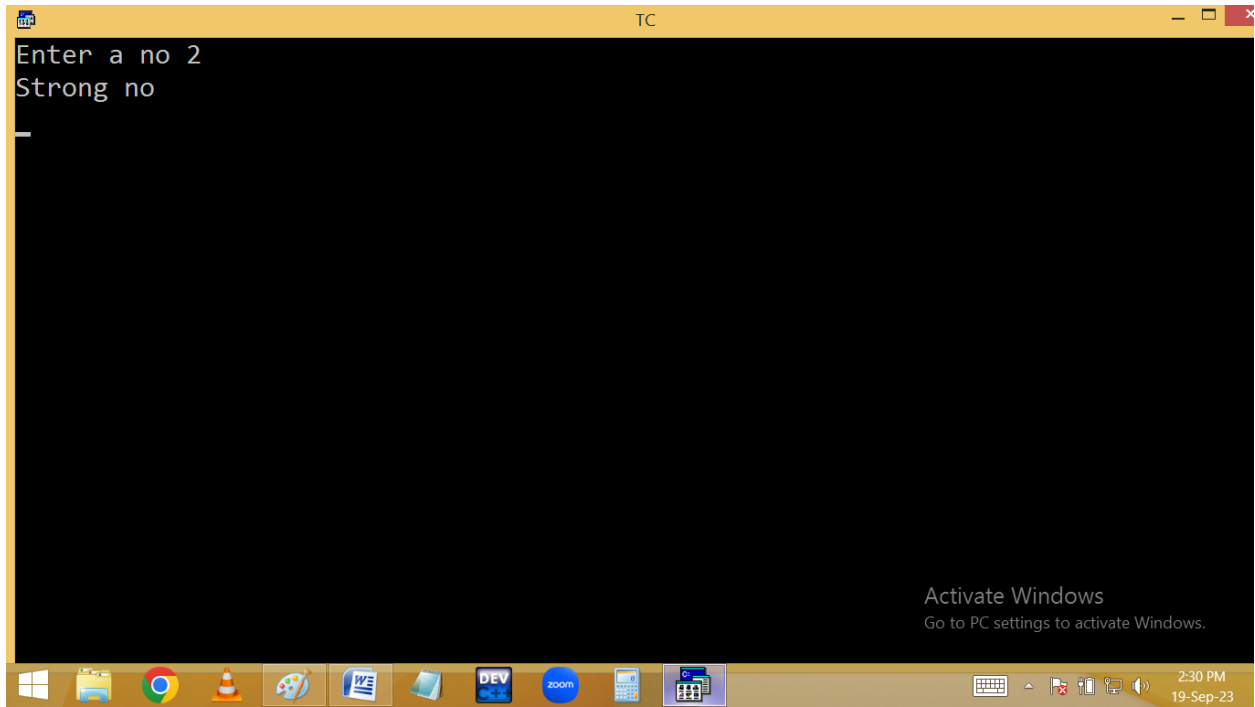


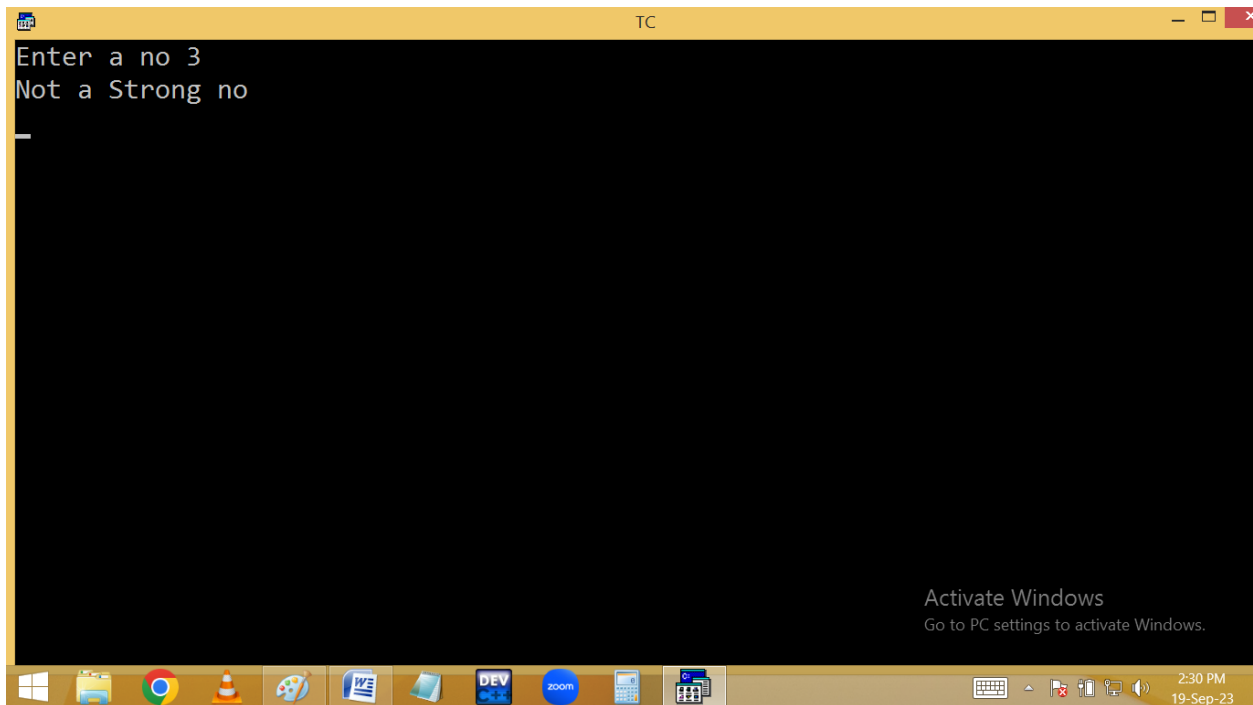
The screenshot shows a Turbo C++ IDE window titled 'TC'. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates 'Line 13 Col 36 Insert Indent Tab Fill Unindent * E:2PM.C'. The code in the editor is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n,m,f,r,s=0;
    clrscr();
    printf("Enter a no "); scanf("%d",&n);
    for(m=n;m!=0;m/=10)
    {
        for(f=1,r=m%10; r>1; r-- )f=f*r;
        s+=f;
    }
    puts(n==s?"Strong no":"Not a Strong no");
    getch();
}
```

An 'Activate Windows' watermark is visible in the bottom right corner of the IDE window. The Windows taskbar at the bottom shows various icons including the Start button, File Explorer, Google Chrome, VLC media player, Paint, Word, a folder, DEV, Zoom, a calculator, and a task manager icon. The system clock in the bottom right corner shows '2:30 PM 19-Sep-23'.







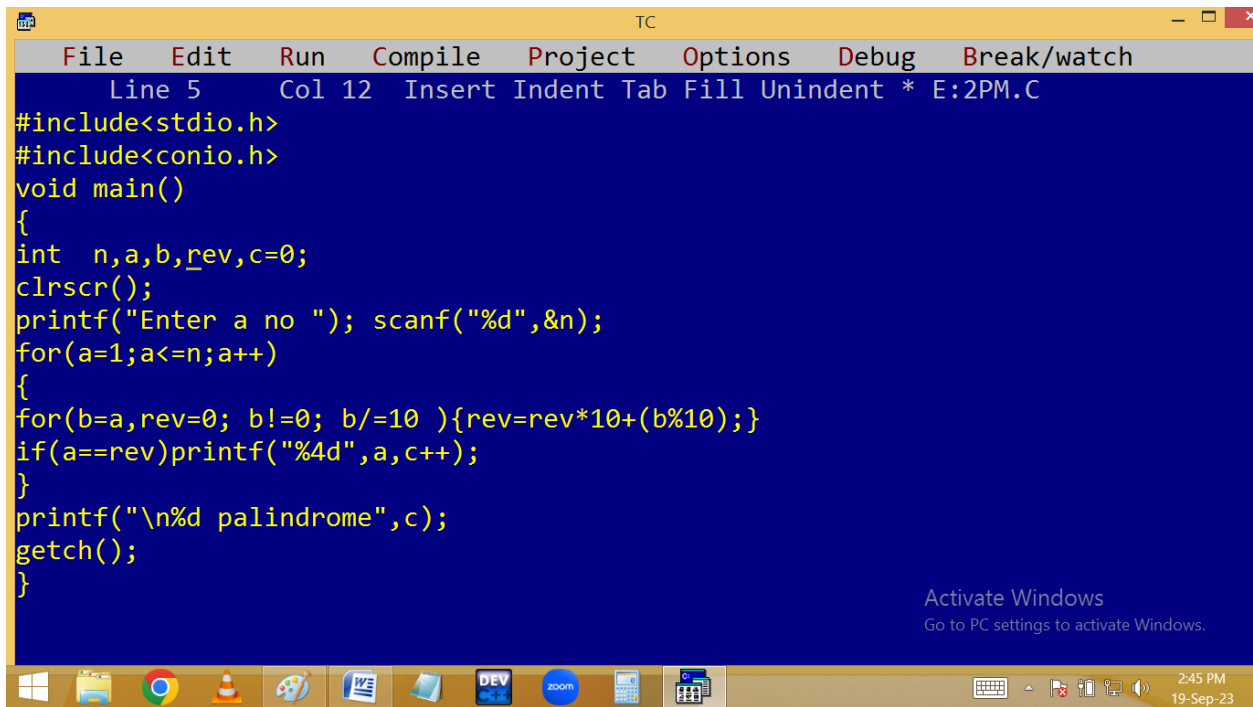
```

for( m=n; m!=0; m/=10 )
{
    for(f=1,r=m%10;r>1;r--)f=f*r;
    s+=f;
}
puts(n==s?"Strong":"Not");

```

n	m	r	f	s
145	145	5	120	0
	14	4	24	120
	1	1	1	144
				145

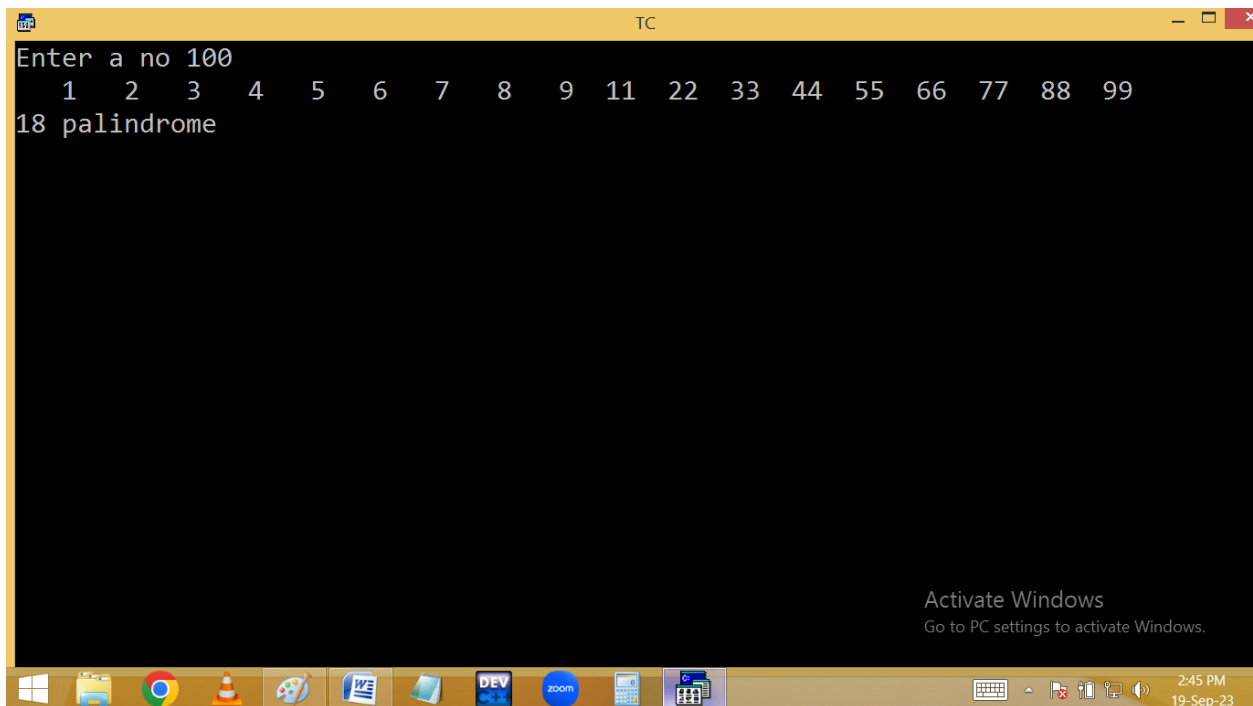
Printing 1..n palindromes and count.



The screenshot shows the Turbo C++ (TC) IDE with a blue background. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates 'Line 5 Col 12 Insert Indent Tab Fill Unindent * E:2PM.C'. The code is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
int  n,a,b,_rev,c=0;
clrscr();
printf("Enter a no "); scanf("%d",&n);
for(a=1;a<=n;a++)
{
for(b=a,_rev=0; b!=0; b/=10 ){rev=rev*10+(b%10);}
if(a==rev)printf("%4d",a,c++);
}
printf("\n%d palindrome",c);
getch();
}
```

An 'Activate Windows' watermark is visible in the bottom right corner of the IDE window. The Windows taskbar at the bottom shows various icons including File Explorer, Chrome, VLC, Paint, Word, and several utility applications.



The screenshot shows the same Turbo C++ IDE window after execution. The output is displayed on a black background with white text:

```
Enter a no 100
1  2  3  4  5  6  7  8  9  11  22  33  44  55  66  77  88  99
18 palindrome
```

The output shows the numbers 1 through 99, with some numbers missing (10, 12, 13, 14, 15, 16, 17, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99). The program correctly identifies 18 palindromes. An 'Activate Windows' watermark is also present in the bottom right corner.

```

TC
Enter a no 333
1 2 3 4 5 6 7 8 9 11 22 33 44 55 66 77 88 99 101 111
121 131 141 151 161 171 181 191 202 212 222 232 242 252 262 272 282 292 303 313
323 333
42 palindrome_

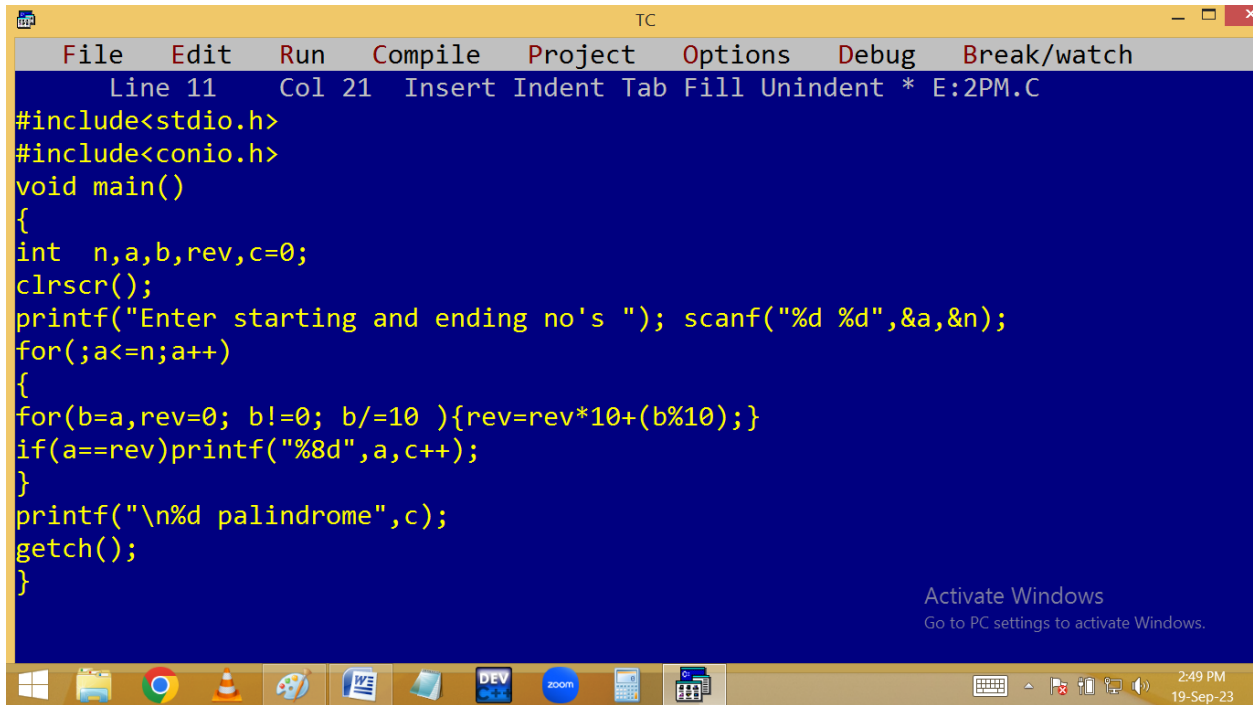
```

Activate Windows
Go to PC settings to activate Windows.

2:45 PM
19-Sep-23

n	a	→	b	r	rev	c
100	✓ 1		$1 \% 10 = 1$		$0 * 10 + 1 = 1$	1
	✓ 2		$2 \% 10 = 2$		$0 * 10 + 2 = 2$	2
	✗ 10		$10 \% 10 = 0$		$0 * 10 + 0 = 0$	9
			$1 \% 10 = 1$		$0 * 10 + 1 = 1$	10
	✓ 11		$11 \% 10 = 1$		$0 * 10 + 1 = 1$	11
			$1 \% 10 = 1$		$1 * 10 + 1 = 11$	18

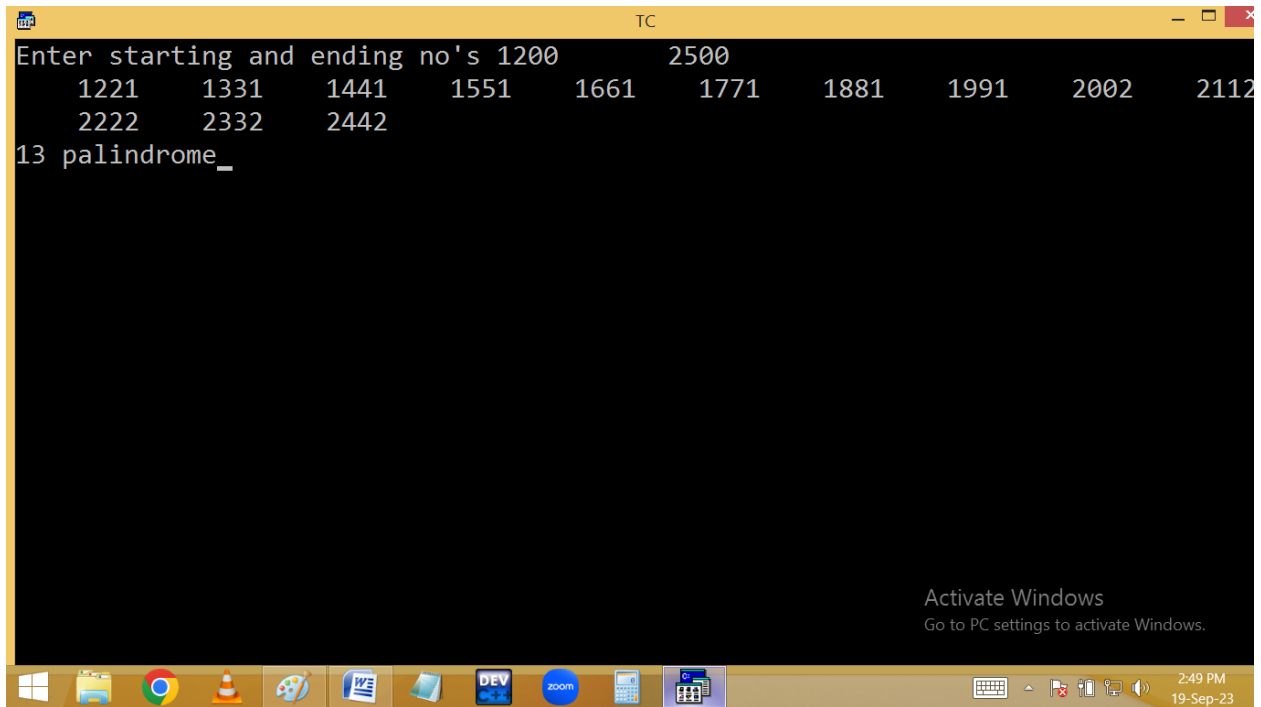
Printing n to n Palindromes and count.



The screenshot shows the Turbo C++ (TC) IDE with a blue background. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates 'Line 11 Col 21 Insert Indent Tab Fill Unindent * E:2PM.C'. The code is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
int  n,a,b,rev,c=0;
clrscr();
printf("Enter starting and ending no's "); scanf("%d %d",&a,&n);
for(;a<=n;a++)
{
for(b=a,rev=0; b!=0; b/=10 ){rev=rev*10+(b%10);}
if(a==rev)printf("%8d",a,c++);
}
printf("\n%d palindrome",c);
getch();
}
```

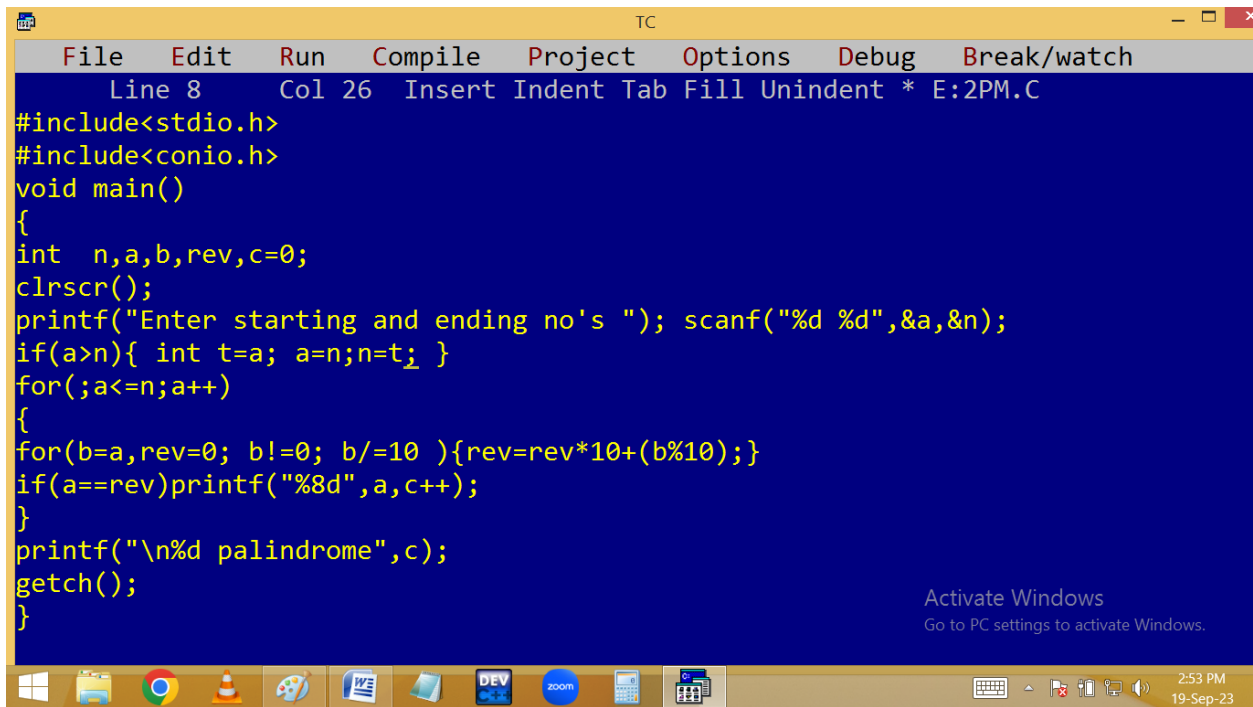
An 'Activate Windows' watermark is visible in the bottom right corner of the IDE window. The Windows taskbar at the bottom shows various icons including File Explorer, Chrome, VLC, Paint, Word, and several utility icons. The system clock shows 2:49 PM on 19-Sep-23.



The screenshot shows the same Turbo C++ IDE with a black background, displaying the output of the program. The text is as follows:

```
Enter starting and ending no's 1200      2500
    1221    1331    1441    1551    1661    1771    1881    1991    2002    2112
    2222    2332    2442
13 palindrome_
```

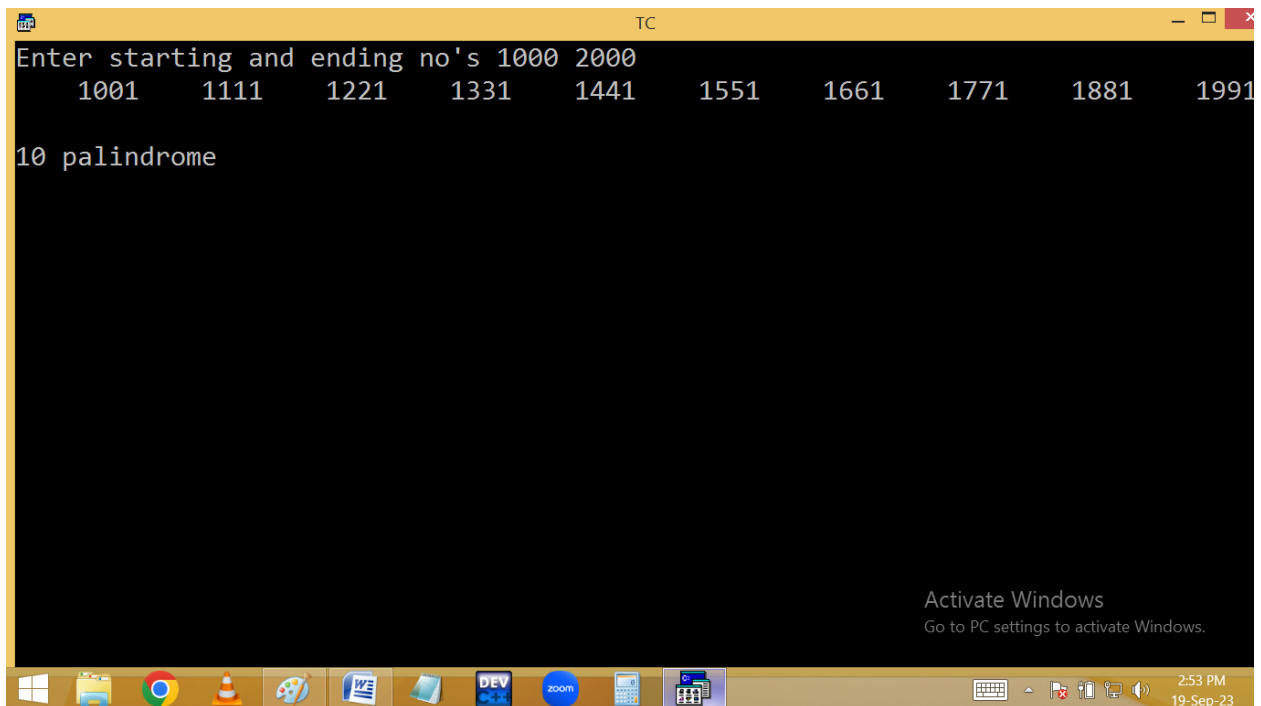
An 'Activate Windows' watermark is visible in the bottom right corner of the IDE window. The Windows taskbar at the bottom is identical to the first screenshot, showing the same icons and system clock (2:49 PM on 19-Sep-23).



The screenshot shows the Turbo C++ (TC) IDE with a blue background. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates 'Line 8 Col 26 Insert Indent Tab Fill Unindent * E:2PM.C'. The code is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n,a,b,rev,c=0;
    clrscr();
    printf("Enter starting and ending no's "); scanf("%d %d",&a,&n);
    if(a>n){ int t=a; a=n;n=t; }
    for(;a<=n;a++)
    {
        for(b=a,rev=0; b!=0; b/=10 ){rev=rev*10+(b%10);}
        if(a==rev)printf("%8d",a,c++);
    }
    printf("\n%d palindrome",c);
    getch();
}
```

An 'Activate Windows' watermark is visible in the bottom right corner of the IDE window. The Windows taskbar at the bottom shows various application icons and the system clock indicating 2:53 PM on 19-Sep-23.



The screenshot shows the same Turbo C++ IDE with a black background, displaying the output of the program. The text is as follows:

```
Enter starting and ending no's 1000 2000
    1001    1111    1221    1331    1441    1551    1661    1771    1881    1991

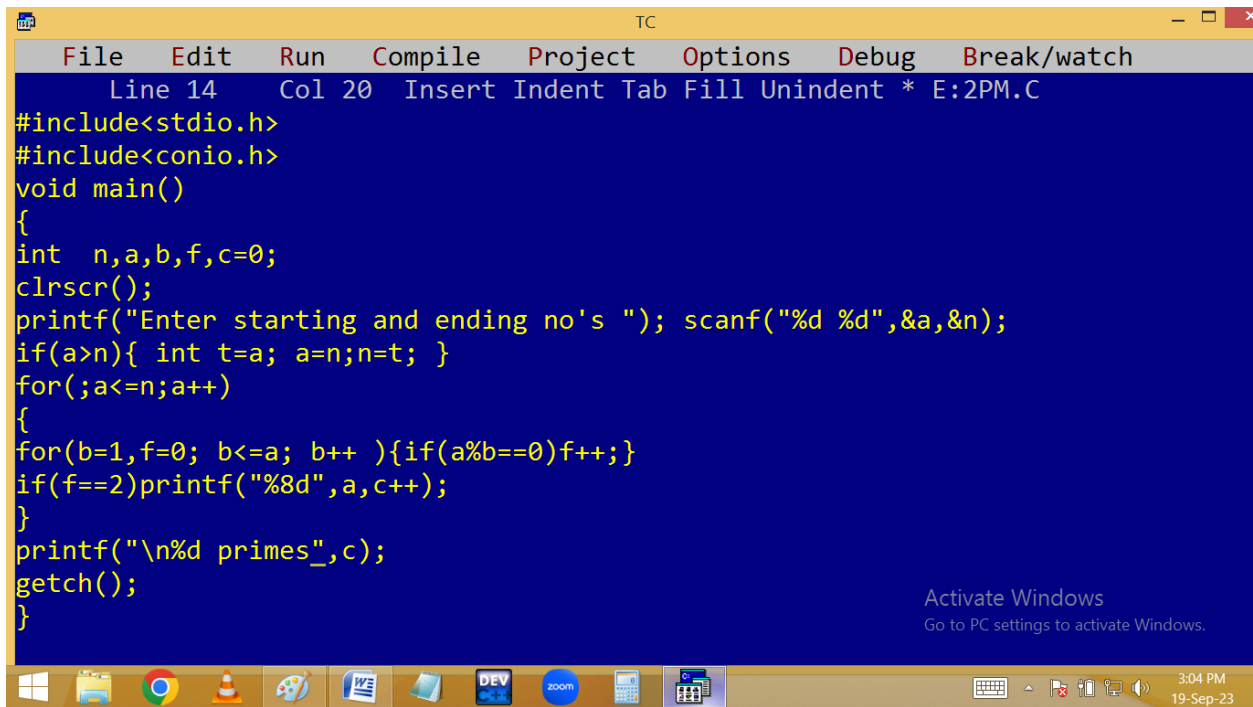
10 palindrome
```

The 'Activate Windows' watermark is also present in the bottom right corner. The Windows taskbar at the bottom is identical to the first screenshot, showing the system clock at 2:53 PM on 19-Sep-23.


```
TC
Enter starting and ending no's 3400 1100
1111 1221 1331 1441 1551 1661 1771 1881 1991 2002
2112 2222 2332 2442 2552 2662 2772 2882 2992 3003
3113 3223 3333
23 palindrome

Activate Windows
Go to PC settings to activate Windows.
```

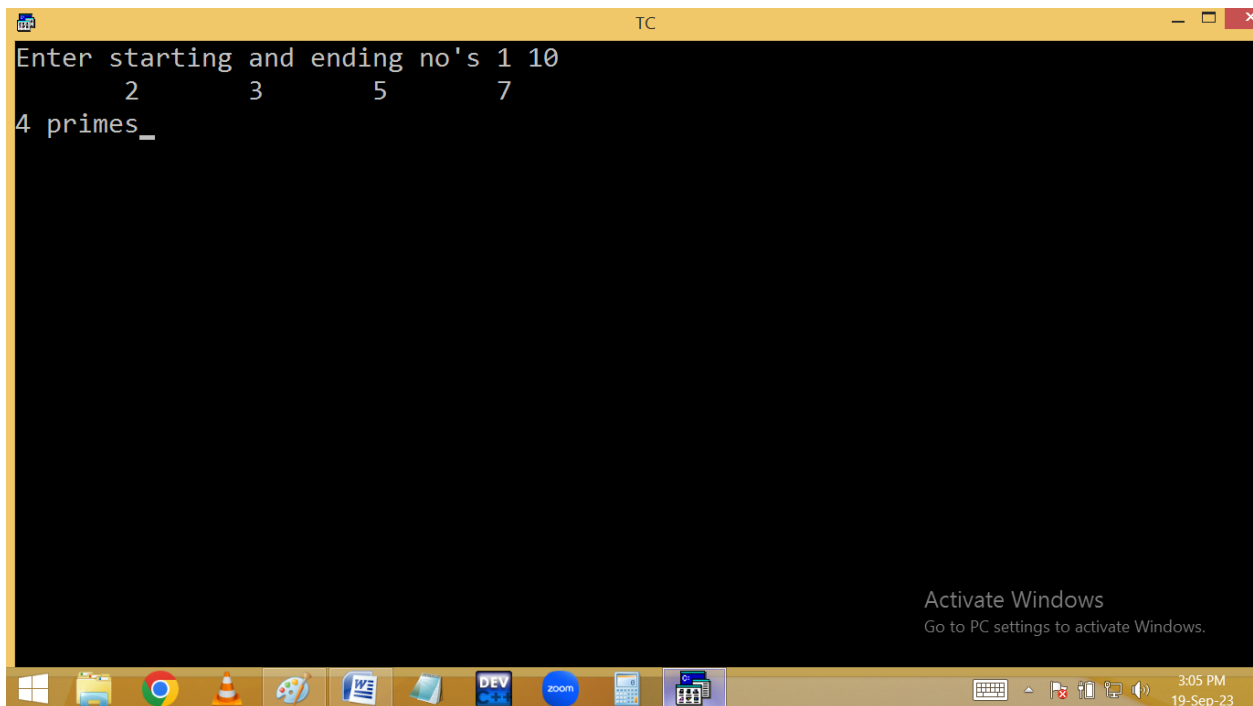
Finding n..n prime's and count:



The screenshot shows the Turbo C++ (TC) IDE with a blue background. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates 'Line 14 Col 20 Insert Indent Tab Fill Unindent * E:2PM.C'. The code is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n,a,b,f,c=0;
    clrscr();
    printf("Enter starting and ending no's "); scanf("%d %d",&a,&n);
    if(a>n){ int t=a; a=n;n=t; }
    for(;a<=n;a++)
    {
        for(b=1,f=0; b<=a; b++ ){if(a%b==0)f++;}
        if(f==2)printf("%8d",a,c++);
    }
    printf("\n%d primes_",c);
    getch();
}
```

An 'Activate Windows' watermark is visible in the bottom right corner of the IDE window. The Windows taskbar at the bottom shows various application icons and the system clock indicating 3:04 PM on 19-Sep-23.



The screenshot shows the same Turbo C++ IDE window after execution. The output is displayed on a black background with white text:

```
Enter starting and ending no's 1 10
      2      3      5      7
4 primes_
```

The 'Activate Windows' watermark is also present here. The system clock in the taskbar now shows 3:05 PM on 19-Sep-23.

```

TC
Enter starting and ending no's 999 777
787 797 809 811 821 823 827 829 839 853
857 859 863 877 881 883 887 907 911 919
929 937 941 947 953 967 971 977 983 991
997
31 primes

```

Activate Windows
Go to PC settings to activate Windows.

3:05 PM
19-Sep-23

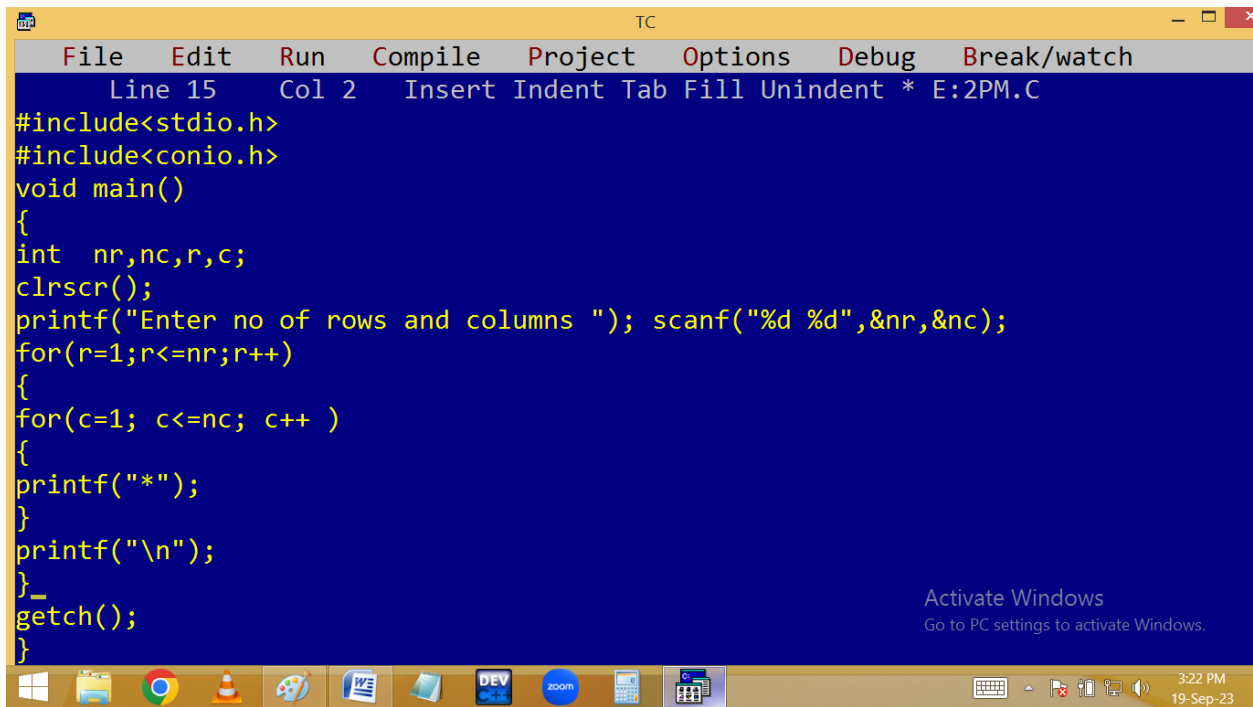
```

for( a=2; a<=n; a++)
{
for( b=1,f=0;b<=a;b++)
{
if(a%b==0)f++;
}
if(f==2)p(a, c++);
}
p("%d primes",c);

```

n	a	b	f	c
10	2	2%1=0	012	1
		2%2=0		
	3	3%1=0	012	2
		3%2=1		
		3%3=0		
	4	4%1=0	0123	
		4%2=0		
		4%4=0		

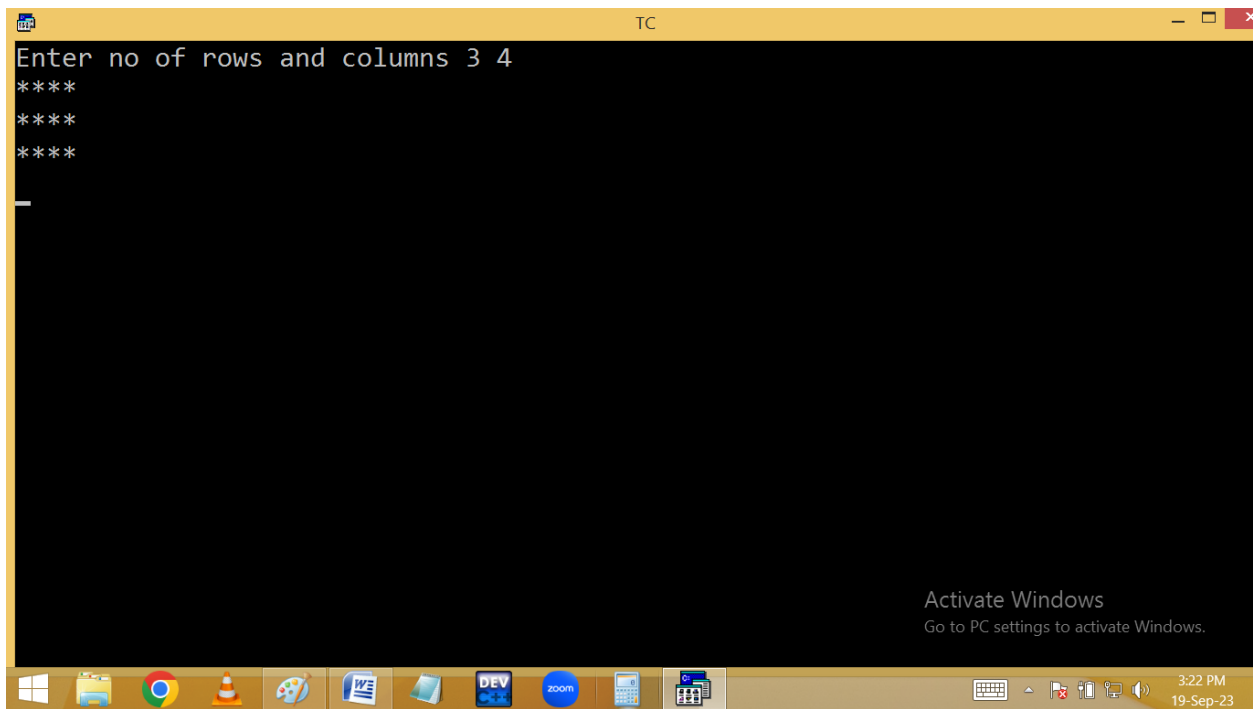
Patterns:



The screenshot shows the Turbo C++ (TC) IDE with a menu bar (File, Edit, Run, Compile, Project, Options, Debug, Break/watch) and a status bar (Line 15, Col 2, Insert, Indent, Tab, Fill, Unindent, * E:2PM.C). The code in the editor is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int  nr,nc,r,c;
    clrscr();
    printf("Enter no of rows and columns "); scanf("%d %d",&nr,&nc);
    for(r=1;r<=nr;r++)
    {
        for(c=1; c<=nc; c++ )
        {
            printf("*");
        }
        printf("\n");
    }_
    getch();
}
```

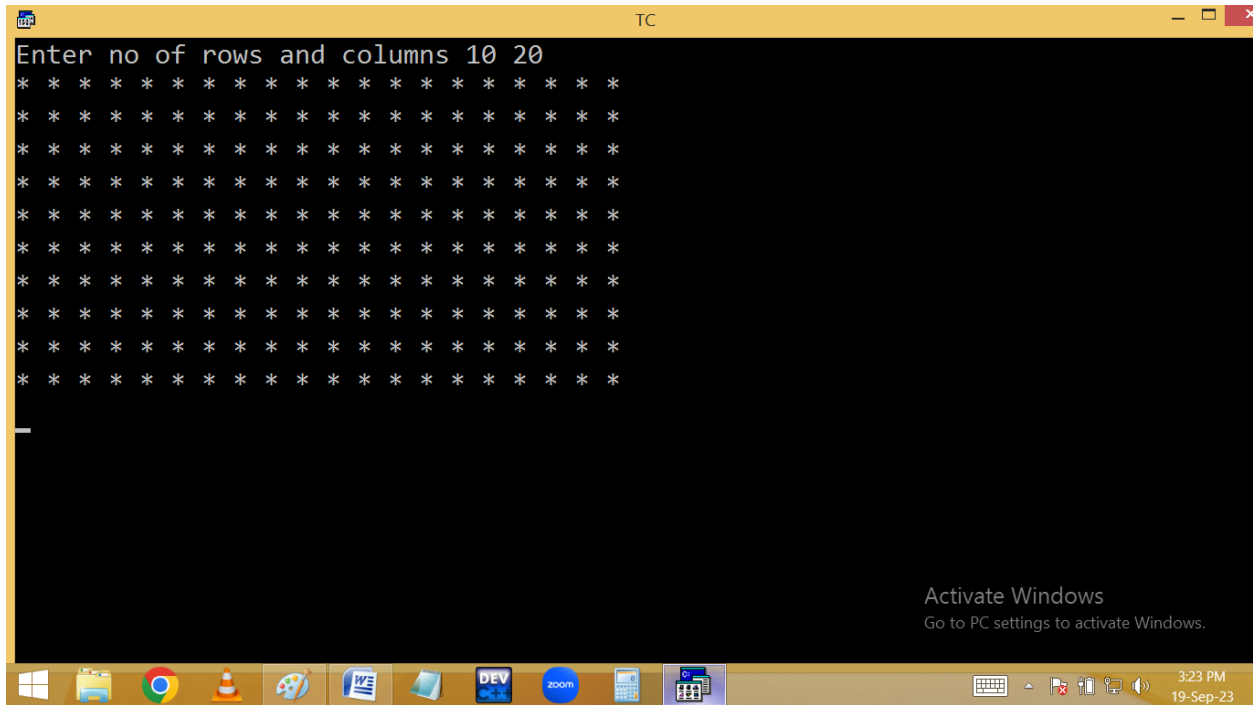
An "Activate Windows" watermark is visible in the bottom right corner of the IDE window. The Windows taskbar at the bottom shows various application icons and the system clock indicating 3:22 PM on 19-Sep-23.



The screenshot shows the Turbo C++ (TC) IDE after the program has been executed. The output window displays the following text:

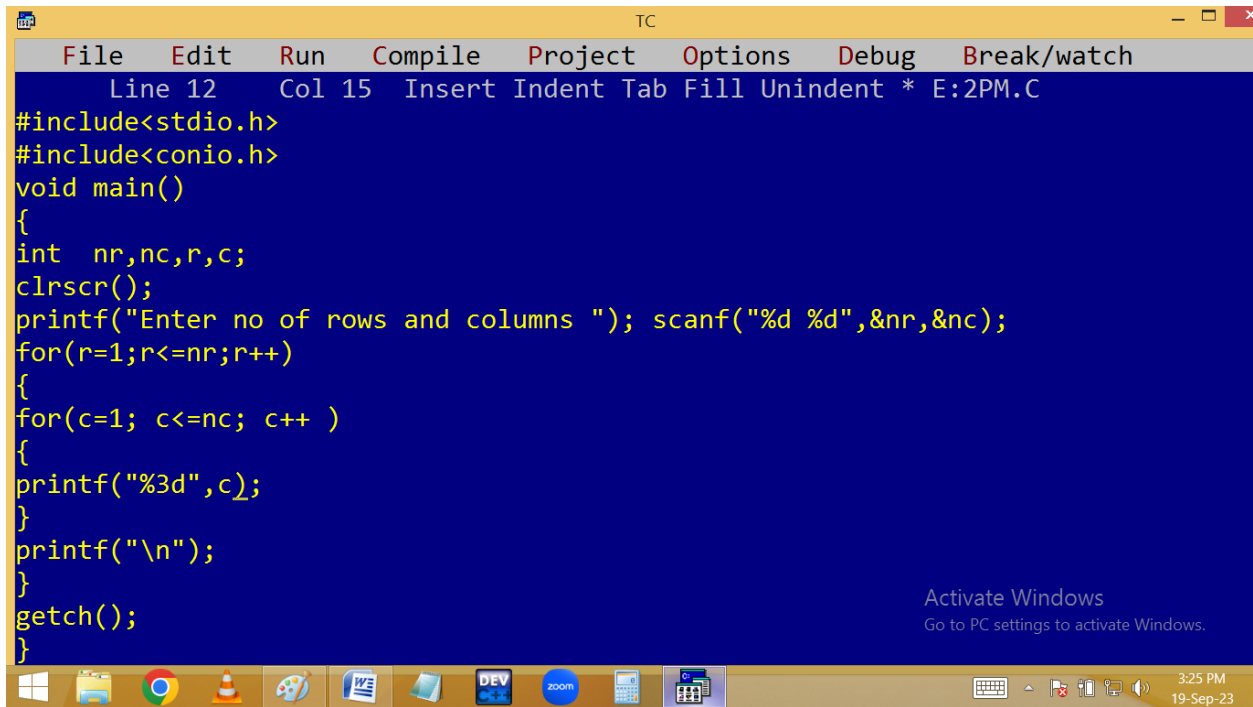
```
Enter no of rows and columns 3 4
****
****
****
_
```

The "Activate Windows" watermark is also present in the bottom right corner. The Windows taskbar at the bottom remains the same, showing the system clock at 3:22 PM on 19-Sep-23.



The screenshot shows a Turbo C++ (TC) console window. The title bar is yellow and contains the text "TC". The main window area is black with white text. At the top, it says "Enter no of rows and columns 10 20". Below this, there is a 10x20 grid of asterisks. The bottom right corner of the window has the text "Activate Windows" and "Go to PC settings to activate Windows." The Windows taskbar is visible at the bottom, showing various icons including File Explorer, Chrome, VLC, Paint, Word, and several development tools. The system clock in the bottom right corner shows "3:23 PM" and "19-Sep-23".

```
Enter no of rows and columns 10 20
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
```



The screenshot shows a Turbo C++ (TC) editor window. The title bar is yellow and contains the text "TC". The menu bar is grey and contains the following items: File, Edit, Run, Compile, Project, Options, Debug, Break/watch. The main window area is blue with white text. The code is as follows:

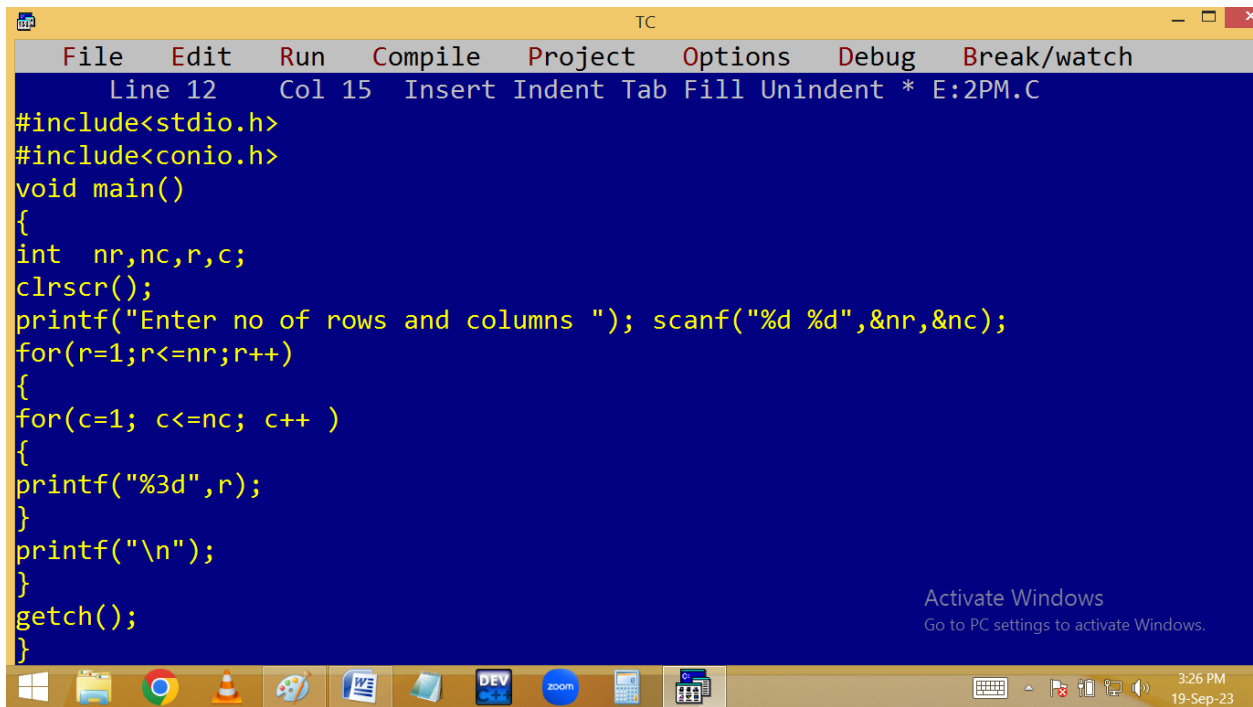
```
Line 12 Col 15 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c;
clrscr();
printf("Enter no of rows and columns "); scanf("%d %d",&nr,&nc);
for(r=1;r<=nr;r++)
{
for(c=1; c<=nc; c++ )
{
printf("%3d",c);
}
printf("\n");
}
getch();
}
```

The bottom right corner of the window has the text "Activate Windows" and "Go to PC settings to activate Windows." The Windows taskbar is visible at the bottom, showing various icons including File Explorer, Chrome, VLC, Paint, Word, and several development tools. The system clock in the bottom right corner shows "3:25 PM" and "19-Sep-23".

```
TC
Enter no of rows and columns 10 10
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10

Activate Windows
Go to PC settings to activate Windows.
```

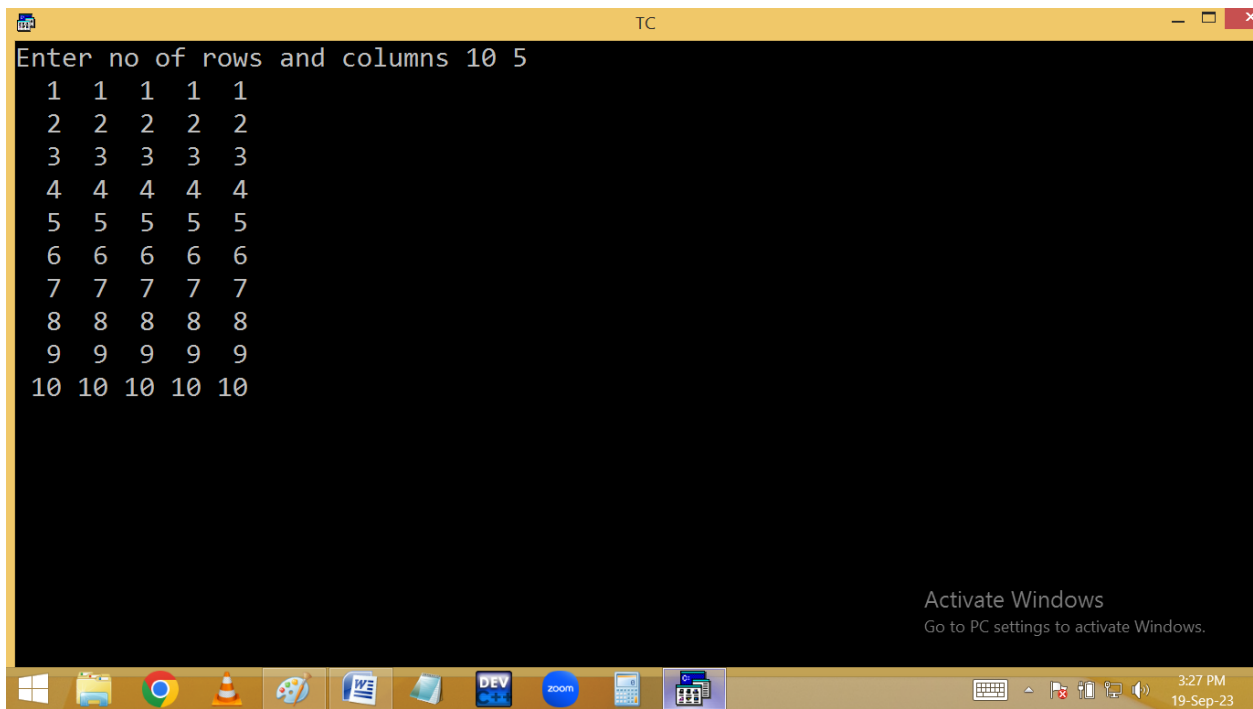
<u>nr</u>	<u>nc</u>	<u>r</u>	<u>c<=4</u>
3	4	1	12345
		2	12345
		3	12345
		4	



The screenshot shows the Turbo C++ (TC) IDE with a blue background. The menu bar includes File, Edit, Run, Compile, Project, Options, Debug, and Break/watch. The status bar at the top indicates 'Line 12 Col 15 Insert Indent Tab Fill Unindent * E:2PM.C'. The code is as follows:

```
#include<stdio.h>
#include<conio.h>
void main()
{
int  nr,nc,r,c;
clrscr();
printf("Enter no of rows and columns "); scanf("%d %d",&nr,&nc);
for(r=1;r<=nr;r++)
{
for(c=1; c<=nc; c++ )
{
printf("%3d",r);
}
printf("\n");
}
getch();
}
```

An 'Activate Windows' watermark is visible in the bottom right corner of the IDE window. The Windows taskbar at the bottom shows various icons including File Explorer, Chrome, VLC, Paint, Word, and several application shortcuts.



The screenshot shows the same Turbo C++ IDE window, but now displaying the output of the program. The prompt 'Enter no of rows and columns 10 5' has been entered. The output is a 10x5 grid of numbers, where each row contains the row number repeated five times:

```
1 1 1 1 1
2 2 2 2 2
3 3 3 3 3
4 4 4 4 4
5 5 5 5 5
6 6 6 6 6
7 7 7 7 7
8 8 8 8 8
9 9 9 9 9
10 10 10 10 10
```

The 'Activate Windows' watermark is also present here. The taskbar at the bottom is identical to the first screenshot.


```
TC
Line 18 Col 52 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c,a;
clrscr();
printf("Enter no of rows and columns "); scanf("%d %d",&nr,&nc);
for(r=1;r<=nr;r++)
{
a=nc;
for(c=1; c<=nc; c++ )
{
if(r%2==1)printf("%3d",c); else printf("%3d",a--);
}
printf("\n");
}
getch();
}
```

Activate Windows
Go to PC settings to activate Windows.

3:38 PM
19-Sep-23

```
TC
Enter no of rows and columns 3 4
1 2 3 4
4 3 2 1
1 2 3 4
```

Activate Windows
Go to PC settings to activate Windows.

Page: 17 of 17 Words: 45 120% 3:38 PM
19-Sep-23

```
Enter no of rows and columns 5 10
 1  2  3  4  5  6  7  8  9 10
10  9  8  7  6  5  4  3  2  1
 1  2  3  4  5  6  7  8  9 10
10  9  8  7  6  5  4  3  2  1
 1  2  3  4  5  6  7  8  9 10
```

Activate Windows
Go to PC settings to activate Windows.

```
File Edit Run Compile Project Options Debug Break/watch
Line 14 Col 17 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c,a;
clrscr();
printf("Enter no of rows and columns "); scanf("%d %d",&nr,&nc);
for(r=1;r<=nr;r++)
{a=r;
for(c=1; c<=nc; c++ )
{
printf("%3d",a++);
}
printf("\n");
}
getch();
}
```

Activate Windows
Go to PC settings to activate Windows.

```
TC
Enter no of rows and columns 5 5
1 2 3 4 5
2 3 4 5 6
3 4 5 6 7
4 5 6 7 8
5 6 7 8 9
```

Activate Windows
Go to PC settings to activate Windows.

3:47 PM
19-Sep-23

home work

AAAA
BBBB
CCCC

AbCdE
AbCdE
AbCdE

AAAA
aaaa
BBBB
bbbb

AaBbCc
AaBbCc
AaBbCc