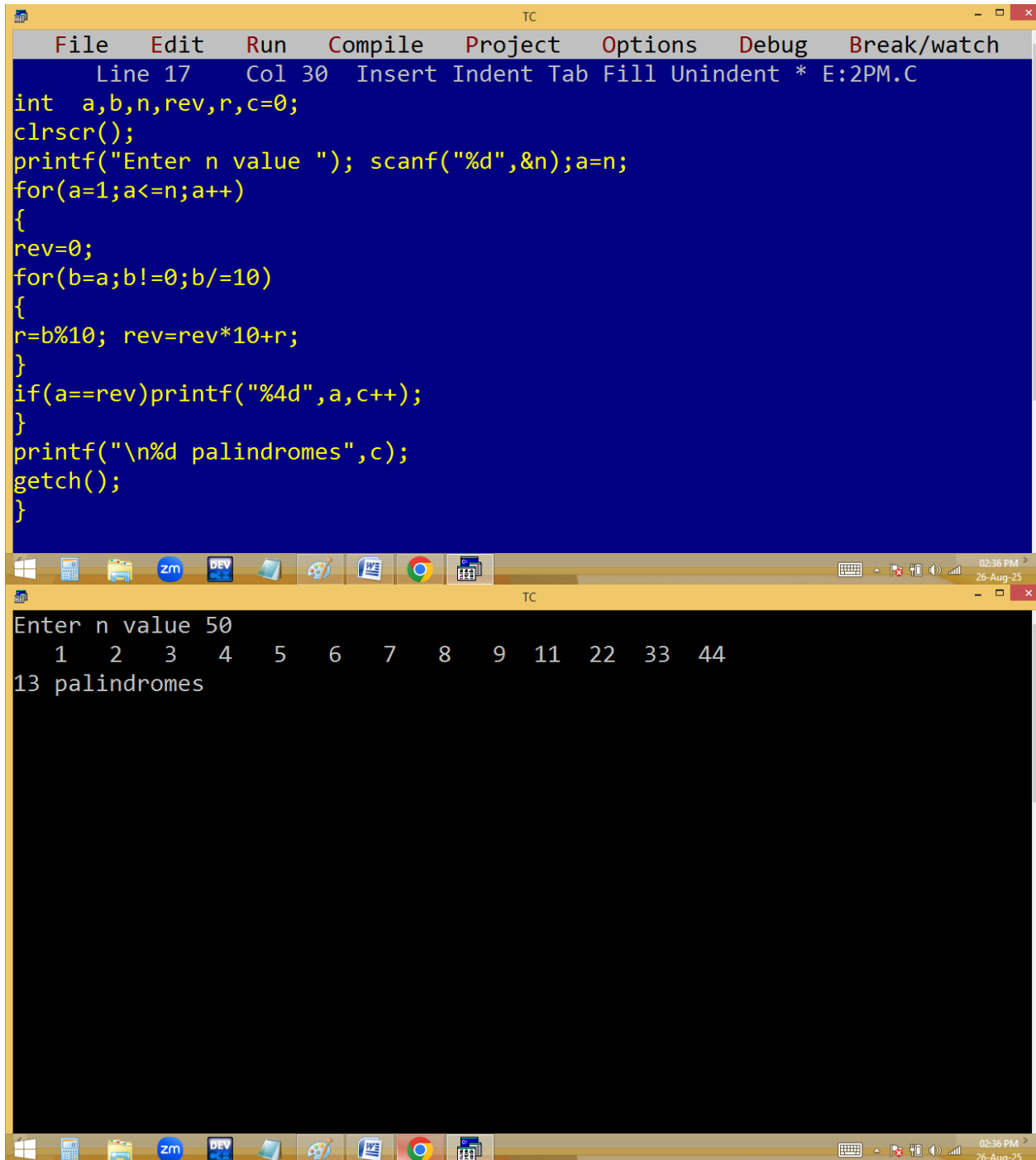


Printing 1..n palindrome no's and count?

n=50 → 1 to 9 11 22 33 44 – 13 palindromes



The image shows a screenshot of the Turbo C++ (TC) IDE. The top window displays the source code for a C program that finds and prints palindromes from 1 to n. The code uses a loop to check each number 'a' by reversing its digits and comparing it to the original. The bottom window shows the program's execution output for n=50, listing the palindromes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 22, 33, and 44, followed by the count '13 palindromes'.

```
File Edit Run Compile Project Options Debug Break/watch
Line 17 Col 30 Insert Indent Tab Fill Unindent * E:2PM.C
int a,b,n,rev,r,c=0;
clrscr();
printf("Enter n value "); scanf("%d",&n);a=n;
for(a=1;a<=n;a++)
{
rev=0;
for(b=a;b!=0;b/=10)
{
r=b%10; rev=rev*10+r;
}
if(a==rev)printf("%4d",a,c++);
}
printf("\n%d palindromes",c);
getch();
}
```

Enter n value 50
1 2 3 4 5 6 7 8 9 11 22 33 44
13 palindromes

```

Enter n value 200
1 2 3 4 5 6 7 8 9 11 22 33 44 55 66 77 88 99 10
121 131 141 151 161 171 181 191
28 palindromes

```

```

50 ✓
for( a=1;a<=n;a++)
{
    rev=0;
    for(b=a; b!=0;b/=10)
    {
        int r=b%10;
        rev=rev*10+r;
    }
    if(a==rev)p(a);
}

```

✓

a	→	b	rev
11		11	1
		11 % 10 = 1	0 × 10 + 1 = 1
		11 / 10 = 1	1 × 10 + 1 = 11
		0	

1
2
1
9
10

Print 1..n prime and count.

```
TC
#include<stdio.h>
#include<conio.h>
void main()
{
int  a,n,i,c,count=0;
clrscr();
printf("Enter n value "); scanf("%d",&n);
for(a=1;a<=n;a++)
{
for(c=0, i=1;i<=a;i++)
{
if(a%i==0)c++;
}
if(c==2)printf("%4d",a,count++);
}
printf("\n%d primes",count);
getch();
}
```

Enter n value 10
2 3 5 7
4 primes

TC

```
TC
Enter n value 100
 2  3  5  7 11 13 17 19 23 29 31 37 41 43 47 53 59 61
73 79 83 89 97
25 primes_
```

Print n to n primes and count?

```
TC
#include<stdio.h>
#include<conio.h>
void main()
{
int  a,n,i,c,count=0; clrscr();
printf("Enter starting and ending values "); scanf("%d%d",&a,&n);
if(a>n){a=a+n; n=a-n; a=a-n;}
for( ;a<=n;a++)
{
for(c=0, i=1;i<=a;i++)
{
if(a%i==0)c++;
}
if(c==2)printf("%4d",a,count++);
}
printf("\n%d primes",count);
getch();
}
```

Enter starting and ending values 40 10
11 13 17 19 23 29 31 37
8 primes

Activate Windows
Go to PC settings to activate Windows.

```
TC
Enter starting and ending values 100 200
101 103 107 109 113 127 131 137 139 149 151 157 163 167 173 179 181 191 193
199
21 primes_
```

Finding Strong no or not?

Sum of factorial of every digit is equal to given no

Eg:

1 factorial is 1

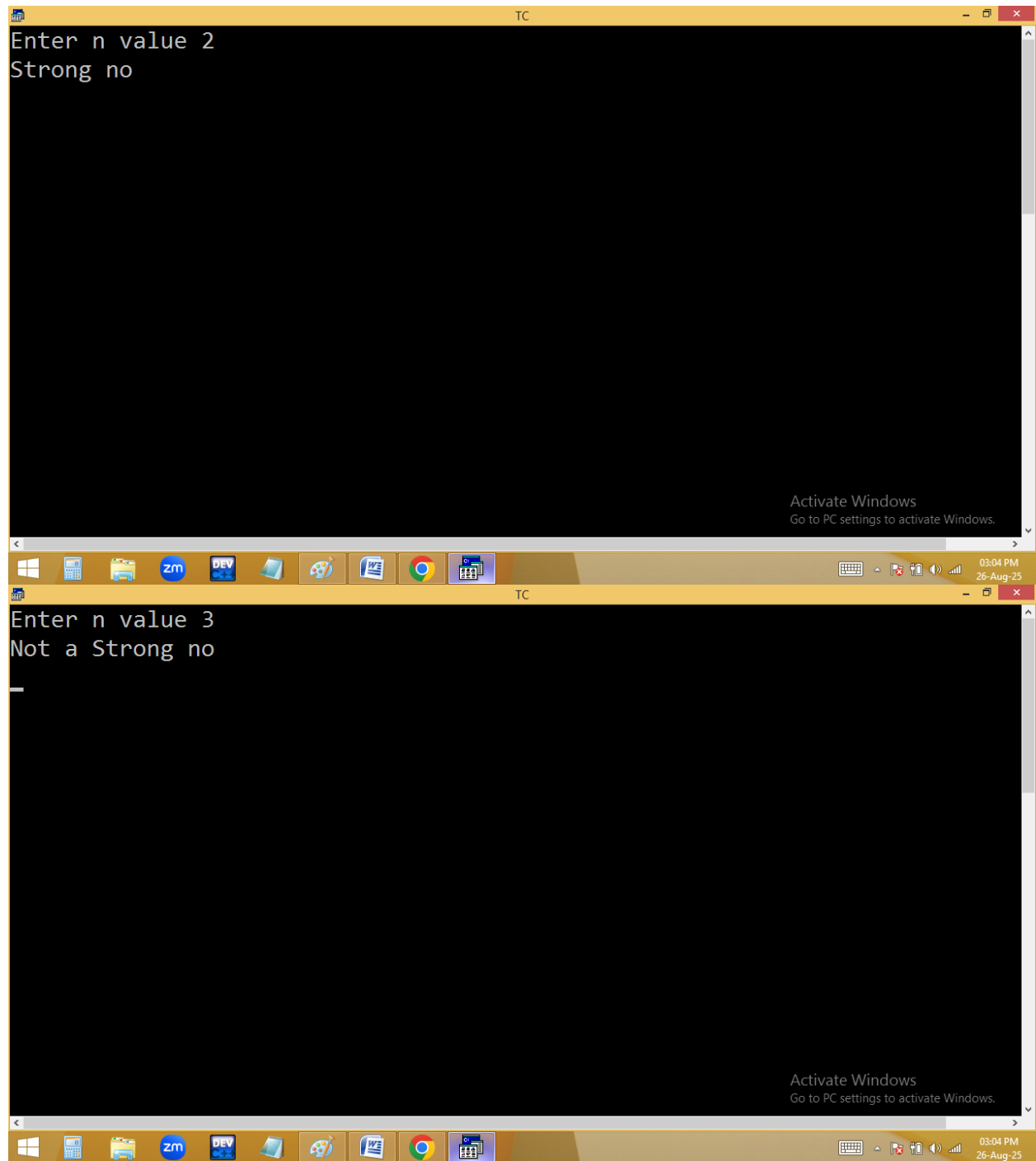
2 factorial 2

3 factorial 6

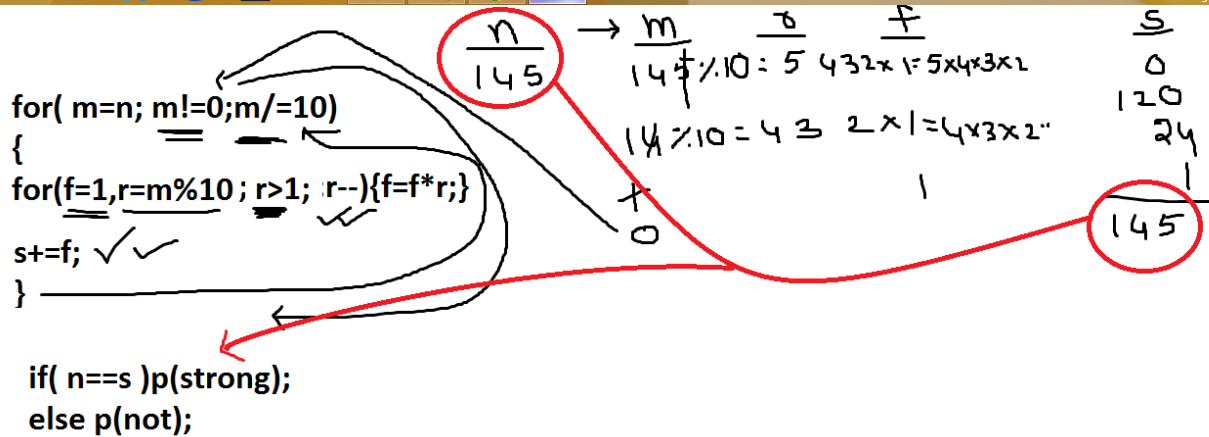
145 → $1! + 4! + 5! = 1 + 24 + 120 = 145$

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

Enter n value 1
Strong no




```
Enter n value 145
Strong no
```

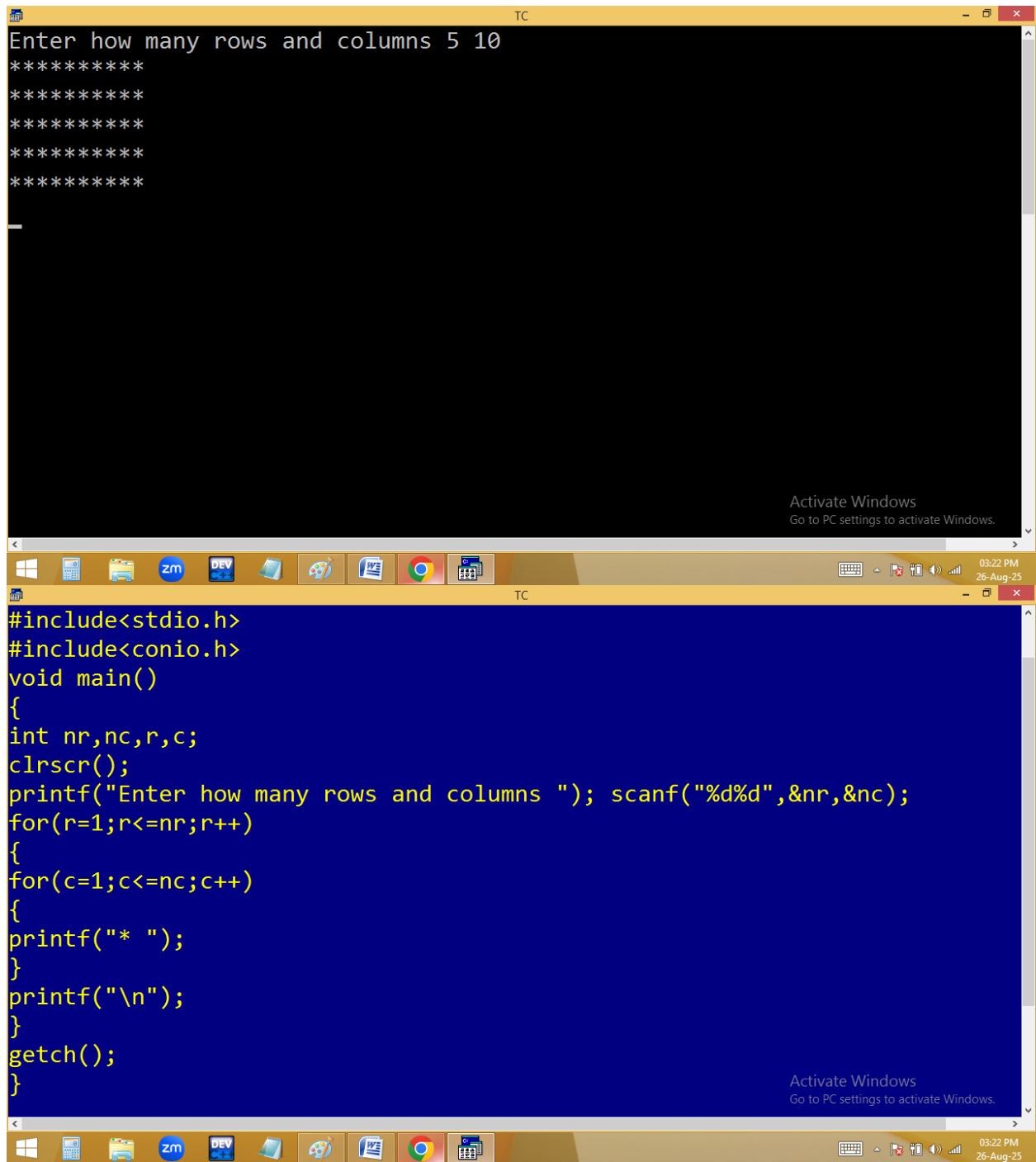


Patterns:

```
TC
Line 17 Col 2 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c;
clrscr();
printf("Enter how many rows and columns "); scanf("%d%d",&nr,&nc);
for(r=1;r<=nr;r++)
{
for(c=1;c<=nc;c++)
{
printf("*");
}
printf("\n");
}
getch();
}

TC
Enter how many rows and columns 3 4
****
****
****

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



The image shows two overlapping Turbo C++ (TC) windows. The top window displays the output of a program: a prompt "Enter how many rows and columns 5 10" followed by five lines of asterisks, each preceded by a tab character. The bottom window shows the source code of the program, which uses nested loops to generate the same star pattern. Both windows have a Windows taskbar at the bottom with various icons and a system clock showing 03:22 PM on 26-Aug-25.

```
Enter how many rows and columns 5 10
*****
*****
*****
*****
*****


#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c;
clrscr();
printf("Enter how many rows and columns "); scanf("%d%d",&nr,&nc);
for(r=1;r<=nr;r++)
{
for(c=1;c<=nc;c++)
{
printf("* ");
}
printf("\n");
}
getch();
}
```

```
TC
Enter how many rows and columns 10 10
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *

Line 17 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 how many 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();
}
```

```
TC
Enter how many rows and columns 6 8
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8

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



```
TC
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c;
clrscr();
printf("Enter how many 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();
}
```

Enter how many rows and columns 6 6

1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6

```
TC
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c,a=1;
clrscr();
printf("Enter how many rows and columns "); scanf("%d%d",&nr,&nc);
for(r=1;r<=nr;r++)
{
for(c=1;c<=nc;c++)
{
if(r%2==0)printf("%3d",--a);else printf("%3d",a++);
}
printf("\n");
}
getch();
}
```

Enter how many 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

```
TC
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c,a;
clrscr();
printf("Enter how many 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==0)printf("%3d",a--);else printf("%3d",c);
}
printf("\n");
}
getch();
}
```

Enter how many rows and columns 7 7

1	2	3	4	5	6	7
7	6	5	4	3	2	1
1	2	3	4	5	6	7
7	6	5	4	3	2	1
1	2	3	4	5	6	7
7	6	5	4	3	2	1
1	2	3	4	5	6	7


```
TC
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c,a;
clrscr();
printf("Enter how many 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();
}
```

Enter how many rows and columns 3 5

```
1 2 3 4 5
2 3 4 5 6
3 4 5 6 7
```

Activate Windows
Go to PC settings to activate Windows.

03:42 PM
26-Aug-25

```
Line 17 Col 18 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 how many rows and columns "); scanf("%d%d",&nr,&nc);
for(r=1;r<=nr;r++)
{a=r;
for(c=1;c<=nc;c++)
{
printf("%2c",64+c);
}
printf("\n");
}
getch();
}
```

Enter how many rows and columns 10 26

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

```
TC
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c,a;
clrscr();
printf("Enter how many rows and columns "); scanf("%d%d",&nr,&nc);
for(r=1;r<=nr;r++)
{a=r;
for(c=1;c<=nc;c++)
{
printf("%2c",96+c);
}
printf("\n");
}
getch();
}
```

Enter how many rows and columns 15 26

```
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
a b c d e f g h i j k l m n o p q r s t u v w x y z
```

Activate Windows
Go to PC settings to activate Windows.

