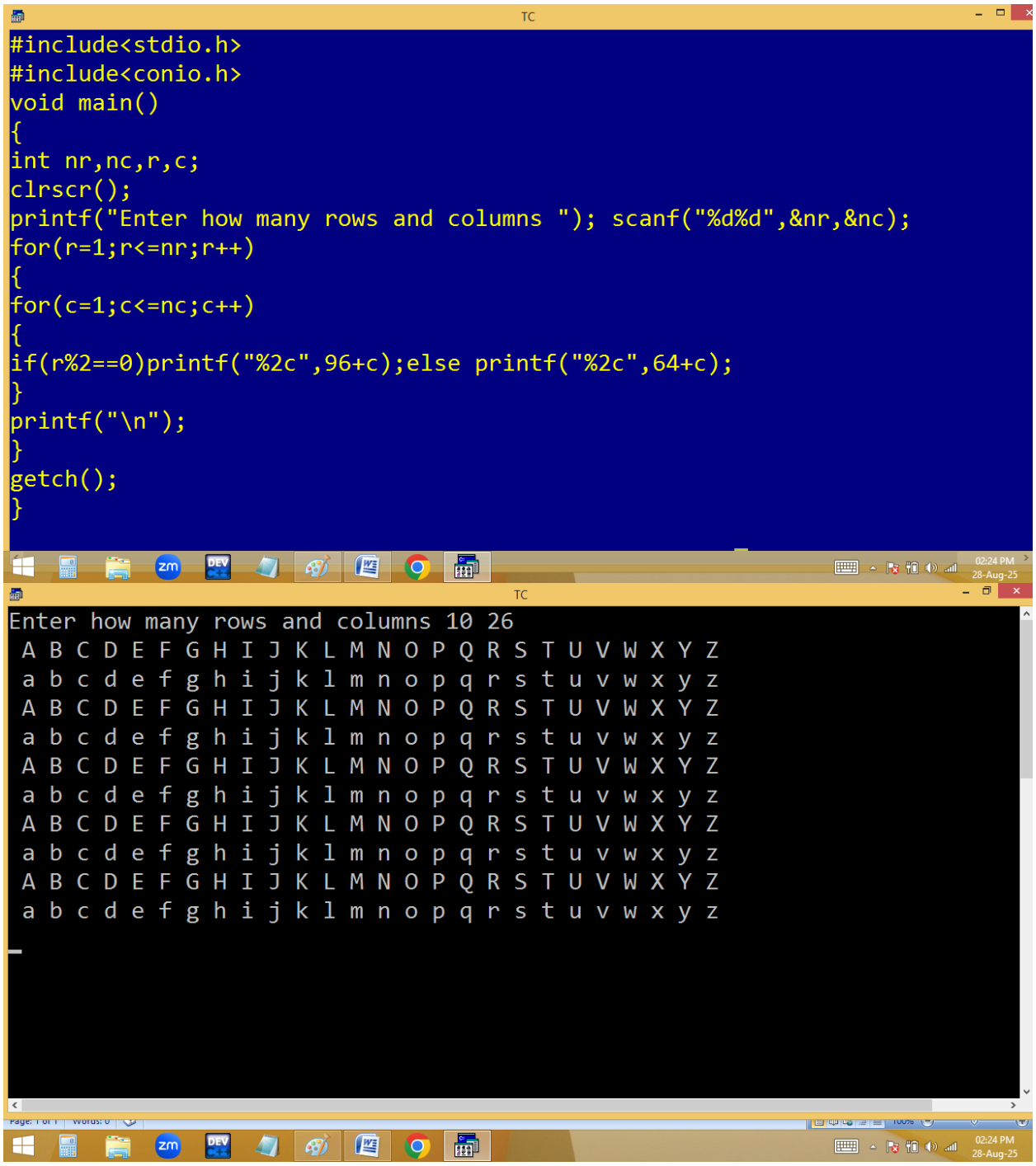
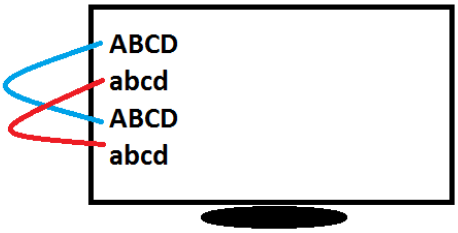
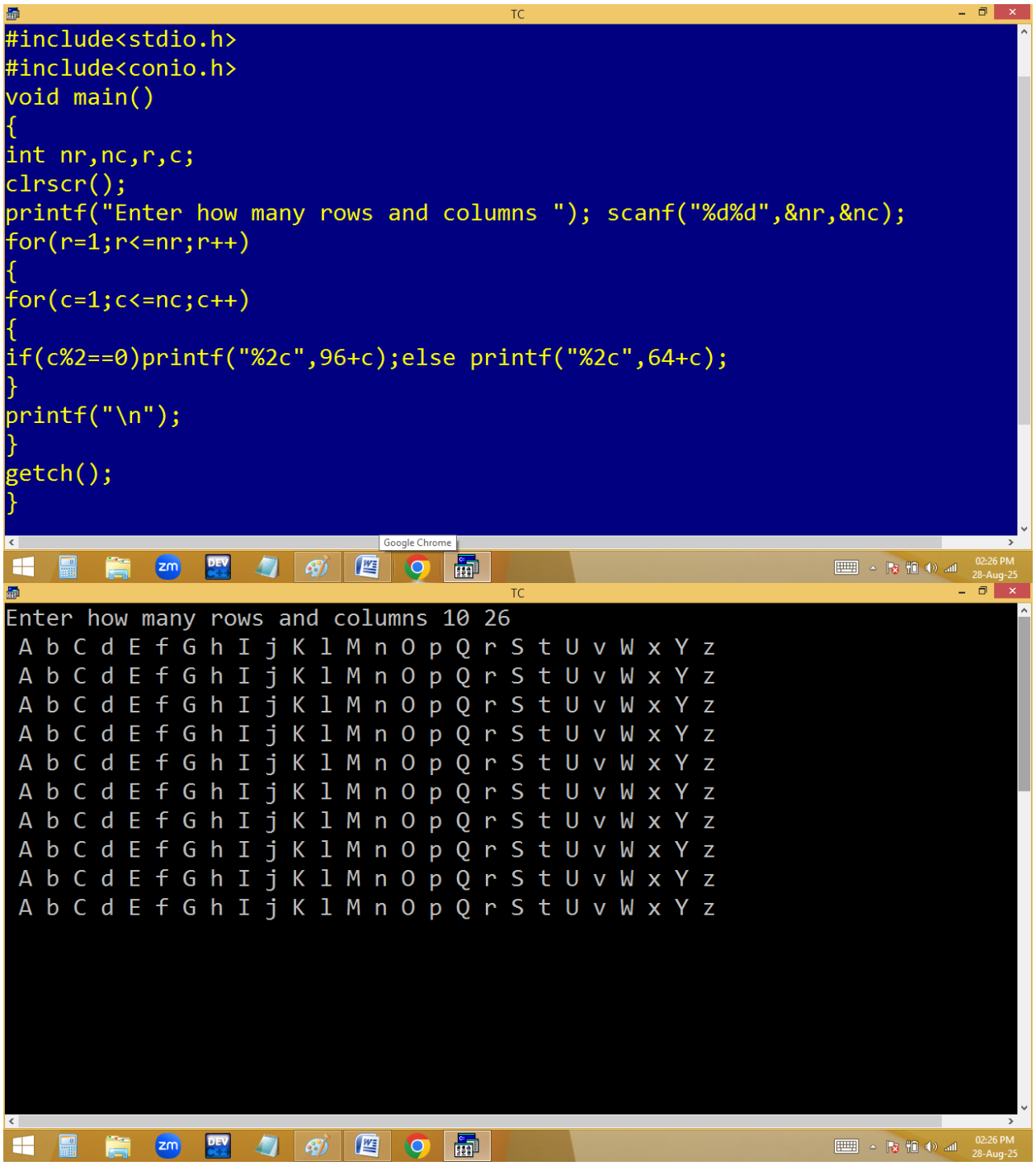
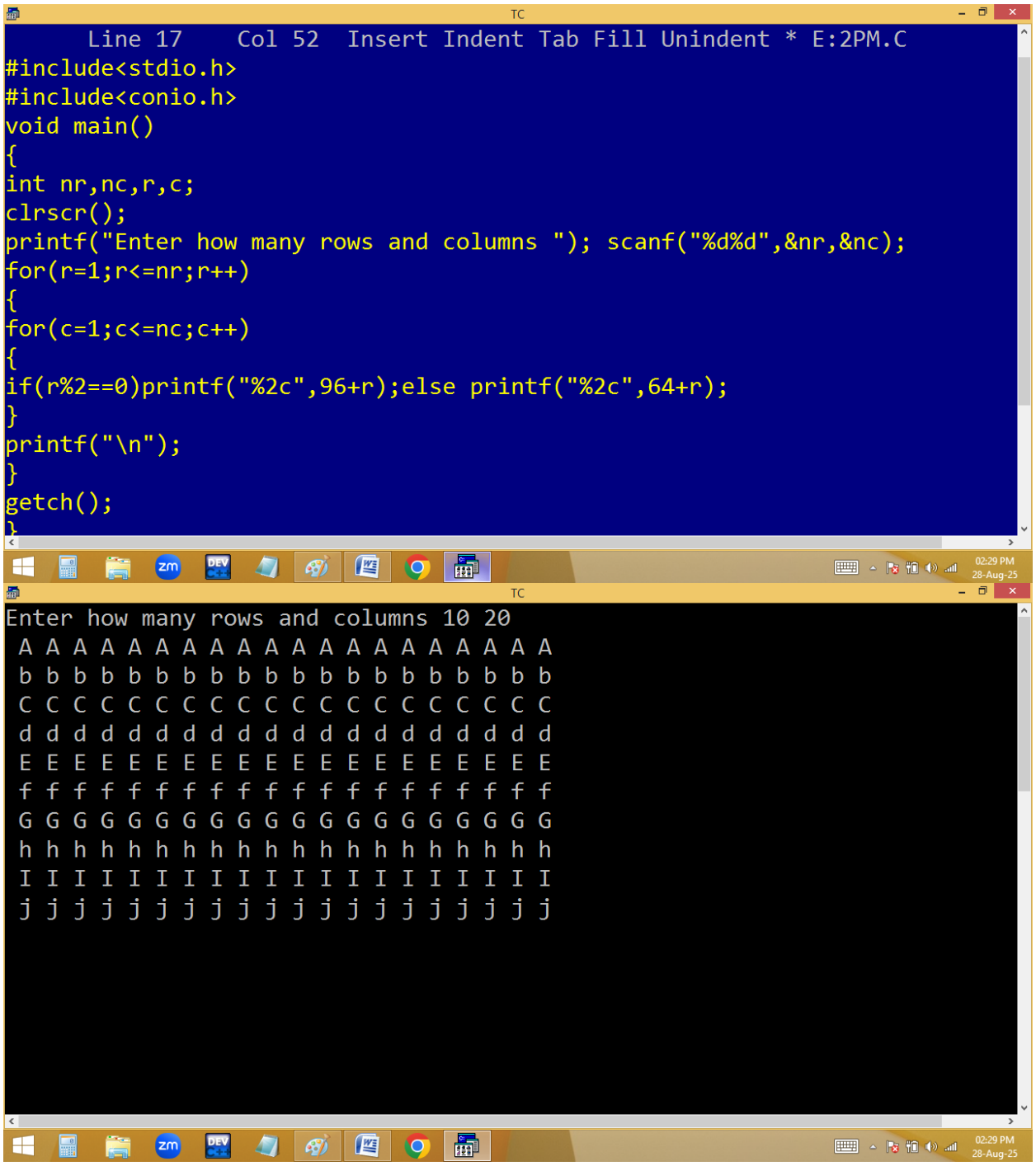

TC
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c;
clrscr();
printf("Enter how many rows and columns "); scanf("%d%d",&nr,&nc);
for(r=1;r<=nr;r++)
{
for(c=1;c<=nc;c++)
{
if(r%2==0)printf("%2c",96+c);else printf("%2c",64+c);
}
printf("\n");
}
getch();
}
TC
Enter how many rows and columns 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

```
for( r=1; r<=4; r++ )
{
for( c=1; c<=4; c++)
{
if(r%2==0) p(96+c);
else  p(64+c);
}
printf("\n");
}
```

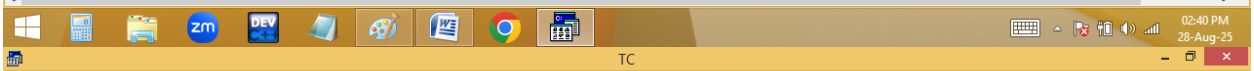



TC
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c;
clrscr();
printf("Enter how many rows and columns "); scanf("%d%d",&nr,&nc);
for(r=1;r<=nr;r++)
{
for(c=1;c<=nc;c++)
{
if(c%2==0)printf("%2c",96+c);else printf("%2c",64+c);
}
printf("\n");
}
getch();
}
Google Chrome
02:26 PM
28-Aug-25
TC
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
02:26 PM
28-Aug-25


TC
Line 17 Col 52 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++)
{
if(r%2==0)printf("%2c",96+r);else printf("%2c",64+r);
}
printf("\n");
}
getch();
}
TC
Enter how many rows and columns 10 20
A A A A A A A A A A A A A A A A A A A A
b b b b b b b b b b b b b b b b b b b b
C C C C C C C C C C C C C C C C C C C C
d d d d d d d d d d d d d d d d d d d d
E E E E E E E E E E E E E E E E E E E E
f f f f f f f f f f f f f f f f f f f f
G G G G G G G G G G G G G G G G G G G G
h h h h h h h h h h h h h h h h h h h h
I I I I I I I I I I I I I I I I I I I I
j j j j j j j j j j j j j j j j j j j j

TC

```
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c; char U='A', L='a';
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("%2c",L);else printf("%2c",U);
}
printf("\n"); if(r%2==0)L++;else U++;
}
getch();
}
```

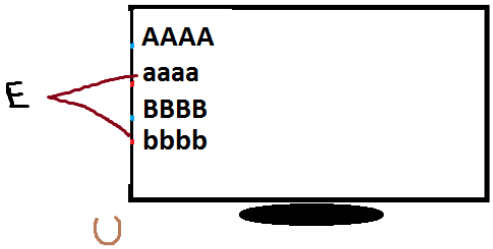


TC

```
Enter how many rows and columns 10 26
 A A A A A A A A A A A A A A A A A A A A A A A A A A
 a a a a a a a a a a a a a a a a a a a a a a a a a a
 B B B B B B B B B B B B B B B B B B B B B B B B B B
 b b b b b b b b b b b b b b b b b b b b b b b b b b
 C C C C C C C C C C C C C C C C C C C C C C C C C C
 c c c c c c c c c c c c c c c c c c c c c c c c c c
 D D D D D D D D D D D D D D D D D D D D D D D D D D
 d d d d d d d d d d d d d d d d d d d d d d d d d d
 E E E E E E E E E E E E E E E E E E E E E E E E E E
 e e e e e e e e e e e e e e e e e e e e e e e e e e
```

```
char U='A', L='a';
for( r=1; r<=4; r++ )
{
for( c=1; c<=4; c++)
{
if(r%2==0) p( L );
else p( U );
}
printf("\n");
}
```

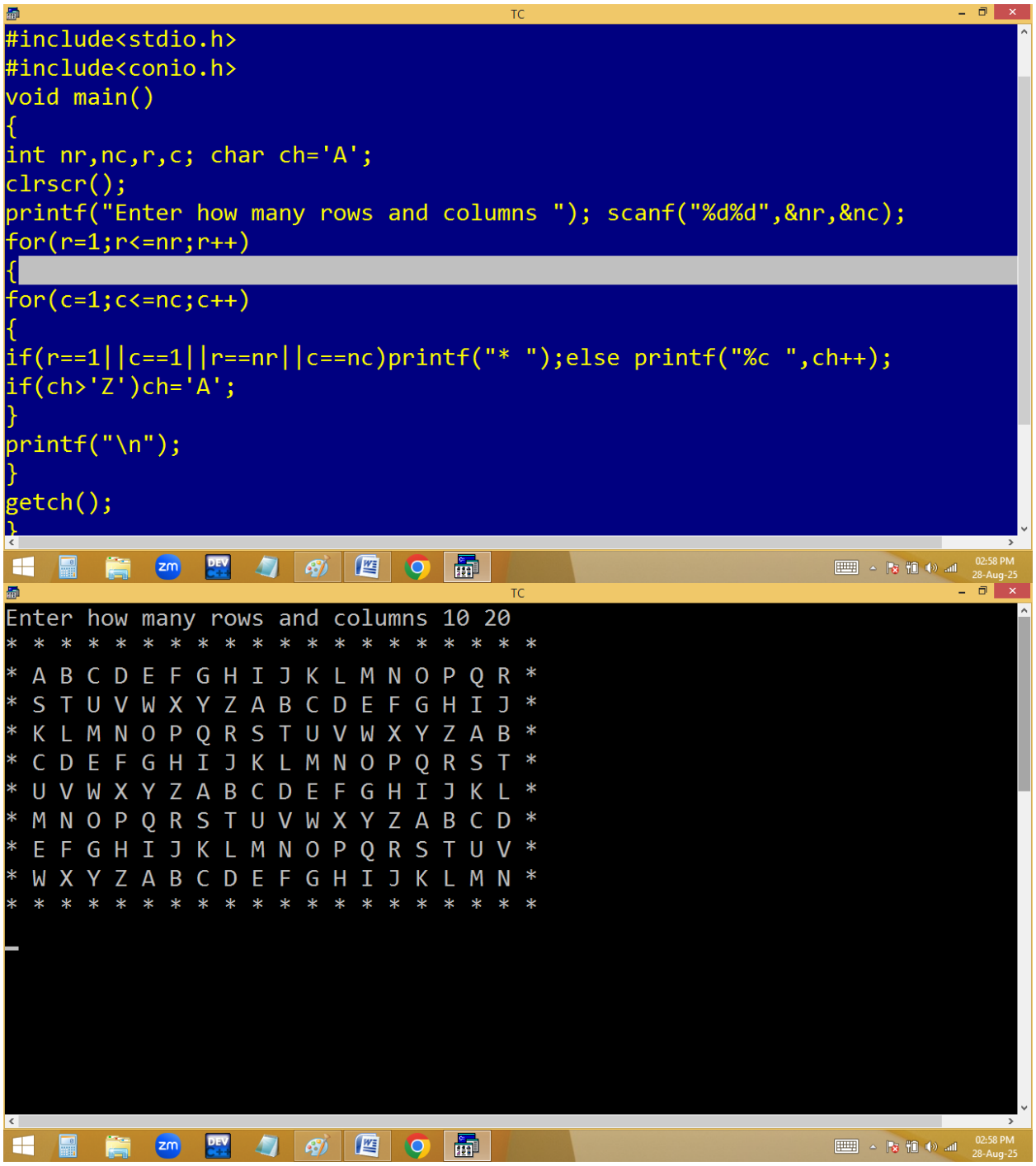
if(r%2==0)L++;else U++;

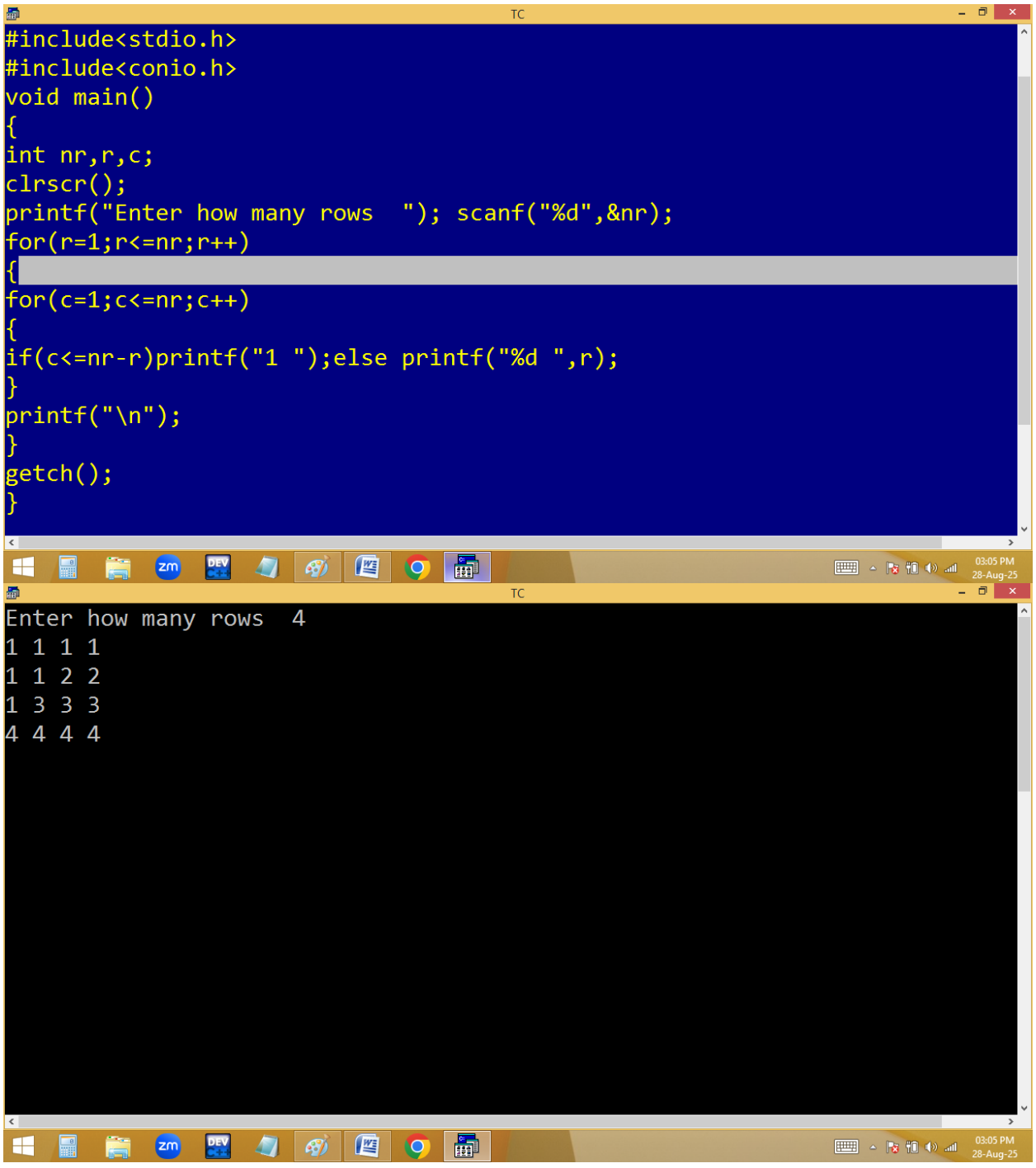


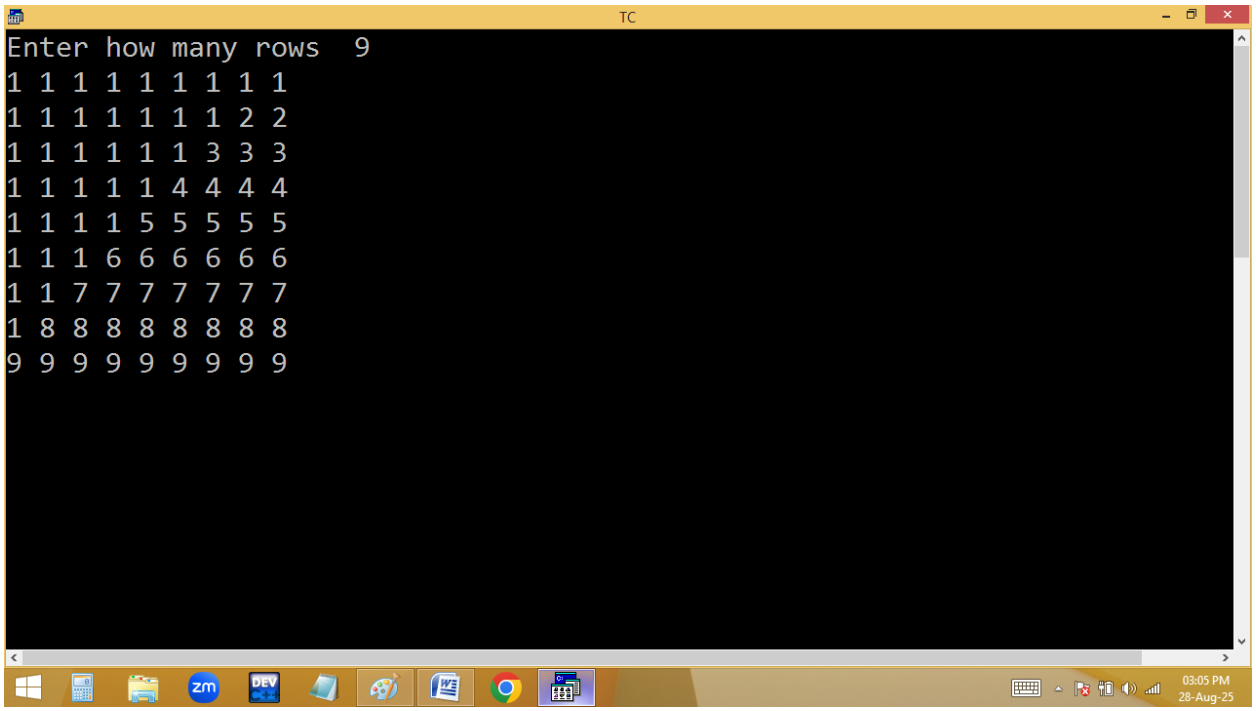
L		U			
2	aaaa	1	A	A	A	A
4	bbbb	3	B	B	B	B
6	cccc	5	C	C	C	C

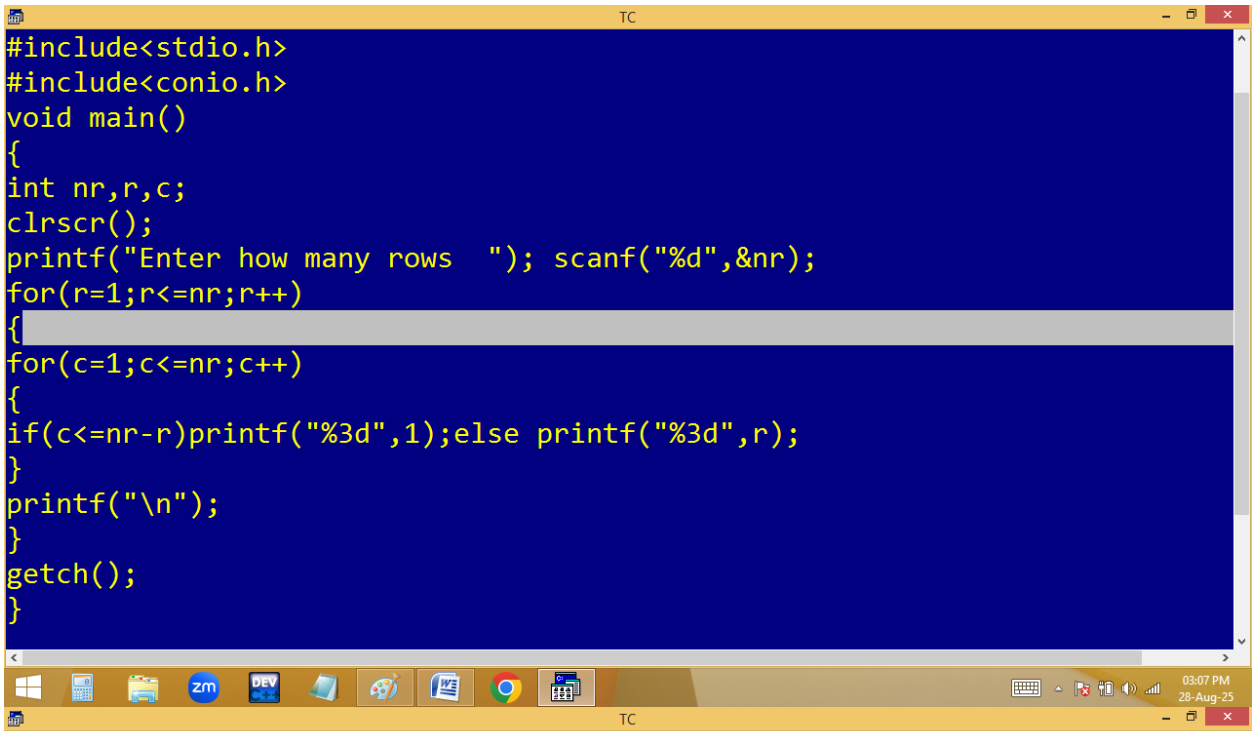
```c
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c;
clrscr();
printf("Enter how many rows and columns "); scanf("%d%d",&nr,&nc);
for(r=1;r<=nr;r++)
{char U='A', L='a';
for(c=1;c<=nc;c++)
{
if(c%2==0)printf("%c",L++);else printf("%c",U++);
}
printf("\n");
}
getch();
}
```

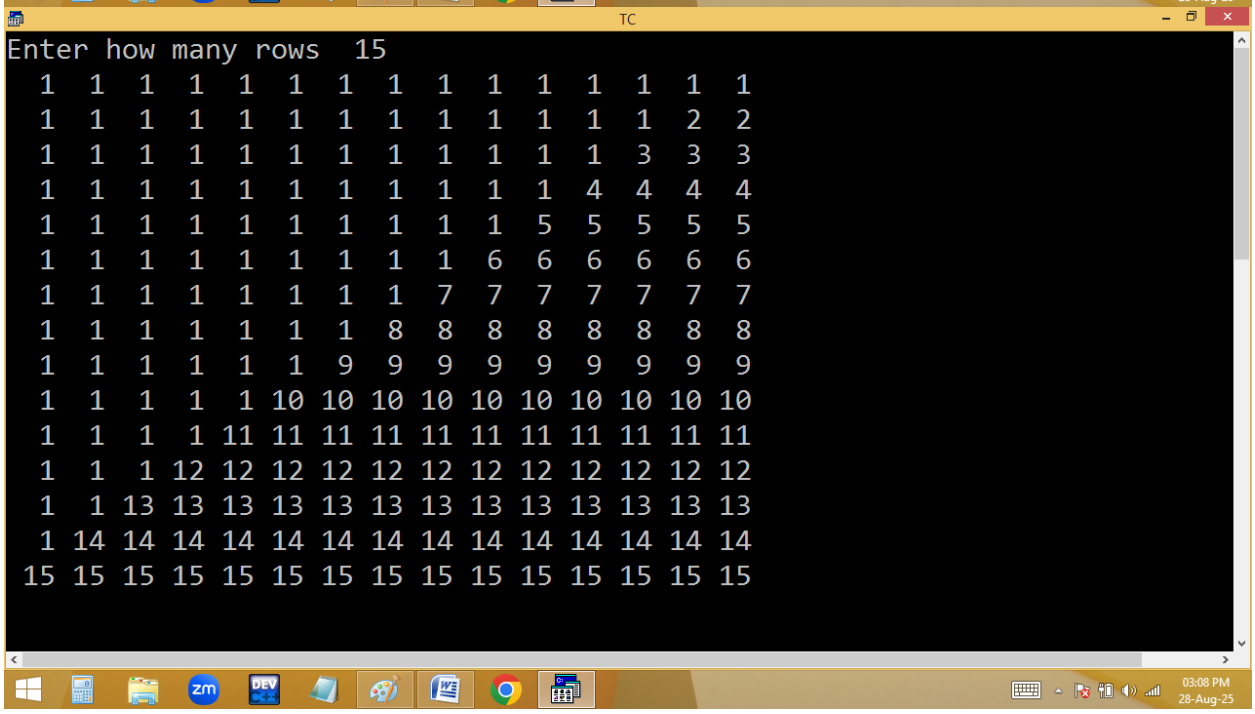
```
Enter how many rows and columns 10 52
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
```


TC
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,nc,r,c; char ch='A';
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==1||c==1||r==nr||c==nc)printf("* ");else printf("%c ",ch++);
if(ch>'Z')ch='A';
}
printf("\n");
}
getch();
}
02:58 PM
28-Aug-25
TC
Enter how many rows and columns 10 20
* * * * * * * * * * * * * * * * * * * *
* 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 *
* * * * * * * * * * * * * * * * * * * *
02:58 PM
28-Aug-25


TC
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,r,c;
clrscr();
printf("Enter how many rows "); scanf("%d",&nr);
for(r=1;r<=nr;r++)
{
for(c=1;c<=nr;c++)
{
if(c<=nr-r)printf("1 ");else printf("%d ",r);
}
printf("\n");
}
getch();
}
TC
Enter how many rows 4
1 1 1 1
1 1 2 2
1 3 3 3
4 4 4 4


TC
Enter how many rows 9
1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 2 2
1 1 1 1 1 1 3 3 3
1 1 1 1 1 4 4 4 4
1 1 1 1 5 5 5 5 5
1 1 1 6 6 6 6 6 6
1 1 7 7 7 7 7 7 7
1 8 8 8 8 8 8 8 8
9 9 9 9 9 9 9 9 9
03:05 PM
28-Aug-25


TC
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,r,c;
clrscr();
printf("Enter how many rows "); scanf("%d",&nr);
for(r=1;r<=nr;r++)
{
for(c=1;c<=nr;c++)
{
if(c<=nr-r)printf("%3d",1);else printf("%3d",r);
}
printf("\n");
}
getch();
}
03:07 PM
28-Aug-25


TC
Enter how many rows 15
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 2 2
1 1 1 1 1 1 1 1 1 1 1 1 3 3 3
1 1 1 1 1 1 1 1 1 1 1 4 4 4 4
1 1 1 1 1 1 1 1 1 1 5 5 5 5 5
1 1 1 1 1 1 1 1 1 6 6 6 6 6 6
1 1 1 1 1 1 1 1 7 7 7 7 7 7 7
1 1 1 1 1 1 1 8 8 8 8 8 8 8 8
1 1 1 1 1 1 9 9 9 9 9 9 9 9 9
1 1 1 1 1 10 10 10 10 10 10 10 10 10 10
1 1 1 1 11 11 11 11 11 11 11 11 11 11 11
1 1 1 12 12 12 12 12 12 12 12 12 12 12 12
1 1 13 13 13 13 13 13 13 13 13 13 13 13 13
1 14 14 14 14 14 14 14 14 14 14 14 14 14 14
15 15 15 15 15 15 15 15 15 15 15 15 15 15 15
03:08 PM
28-Aug-25

```
ch='A';
for( r=1; r<=4; r++ )
{
for( c=1; c<=4; c++)
{
if(c<=n-r)p(1);else p(r);
}
printf("\n");
}
```

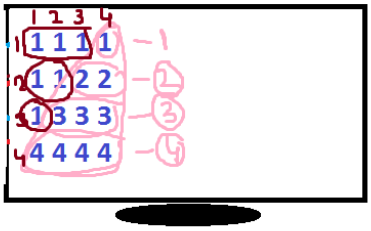
4-3=1
4-2=2
4-1=3

3
2
1

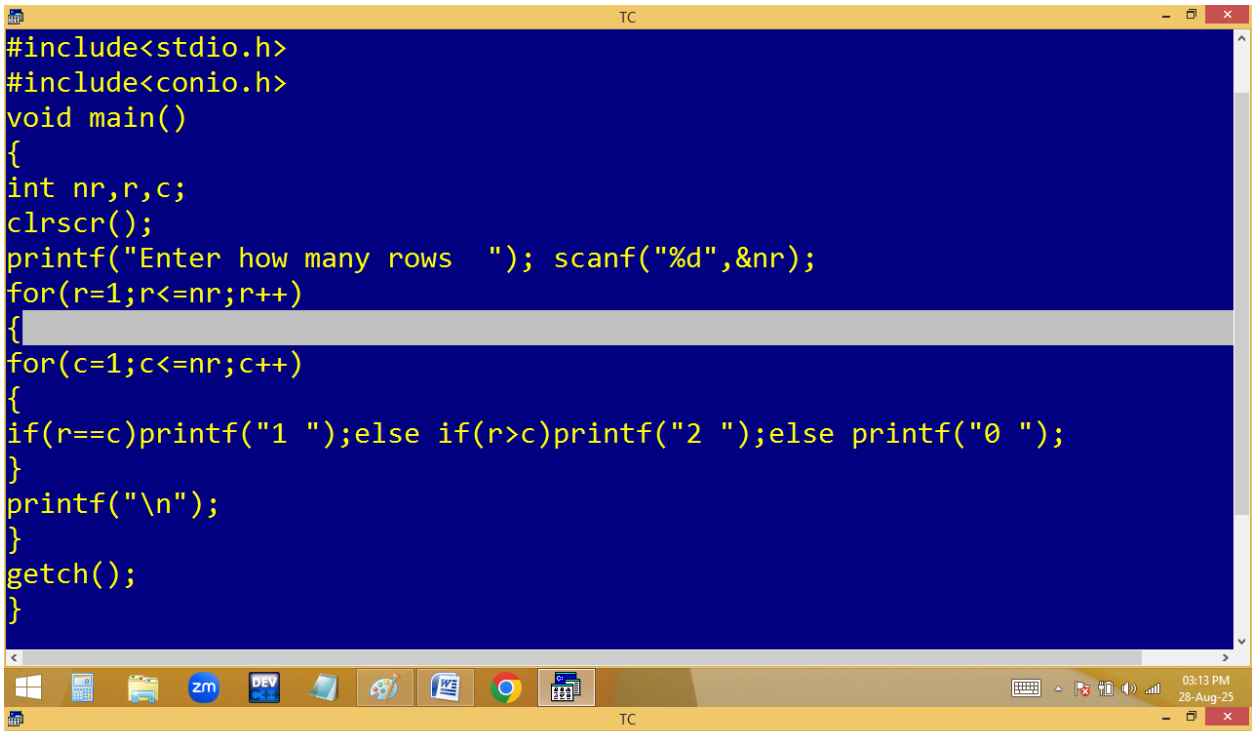
n	-	r	=	
4	-	1	=	3
4	-	2	=	2
4	-	3	=	1
4	-	4	=	0

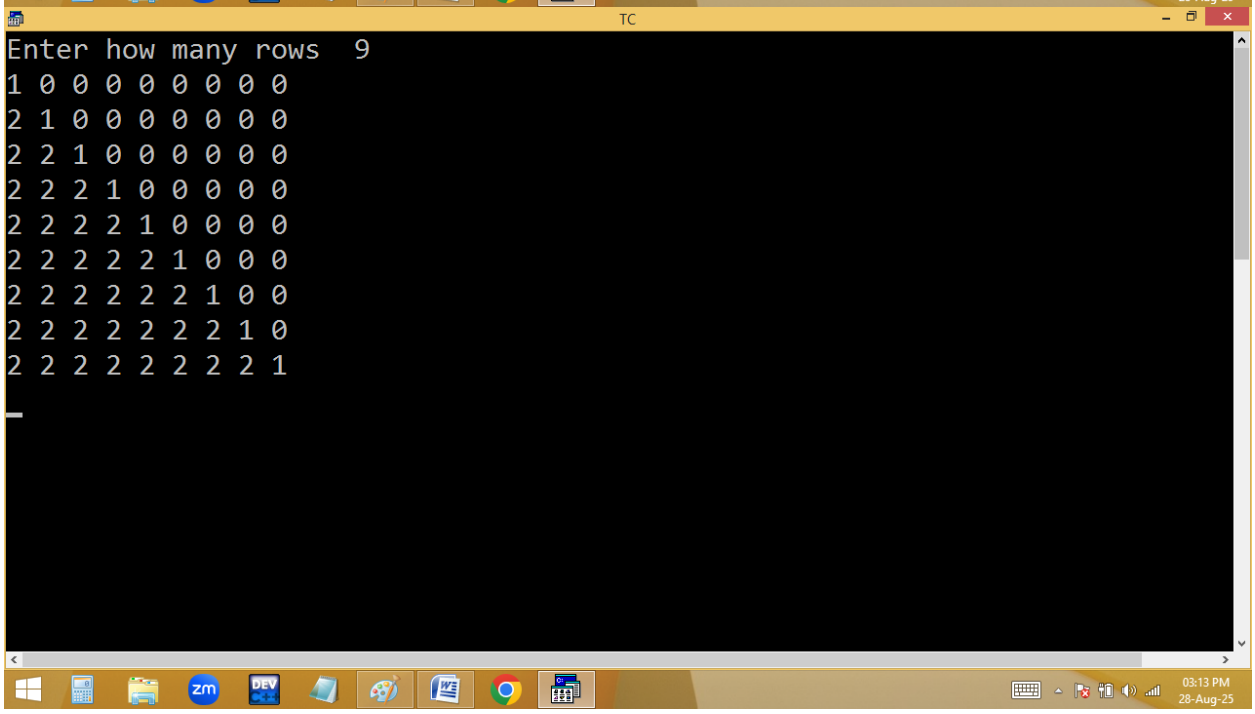
1
2
3
4

L
a

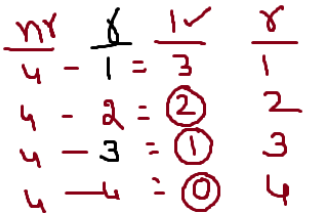


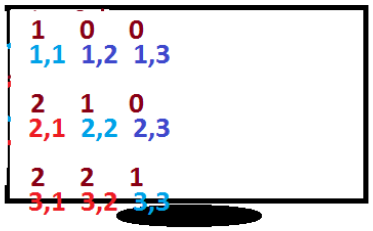
U
A A A A

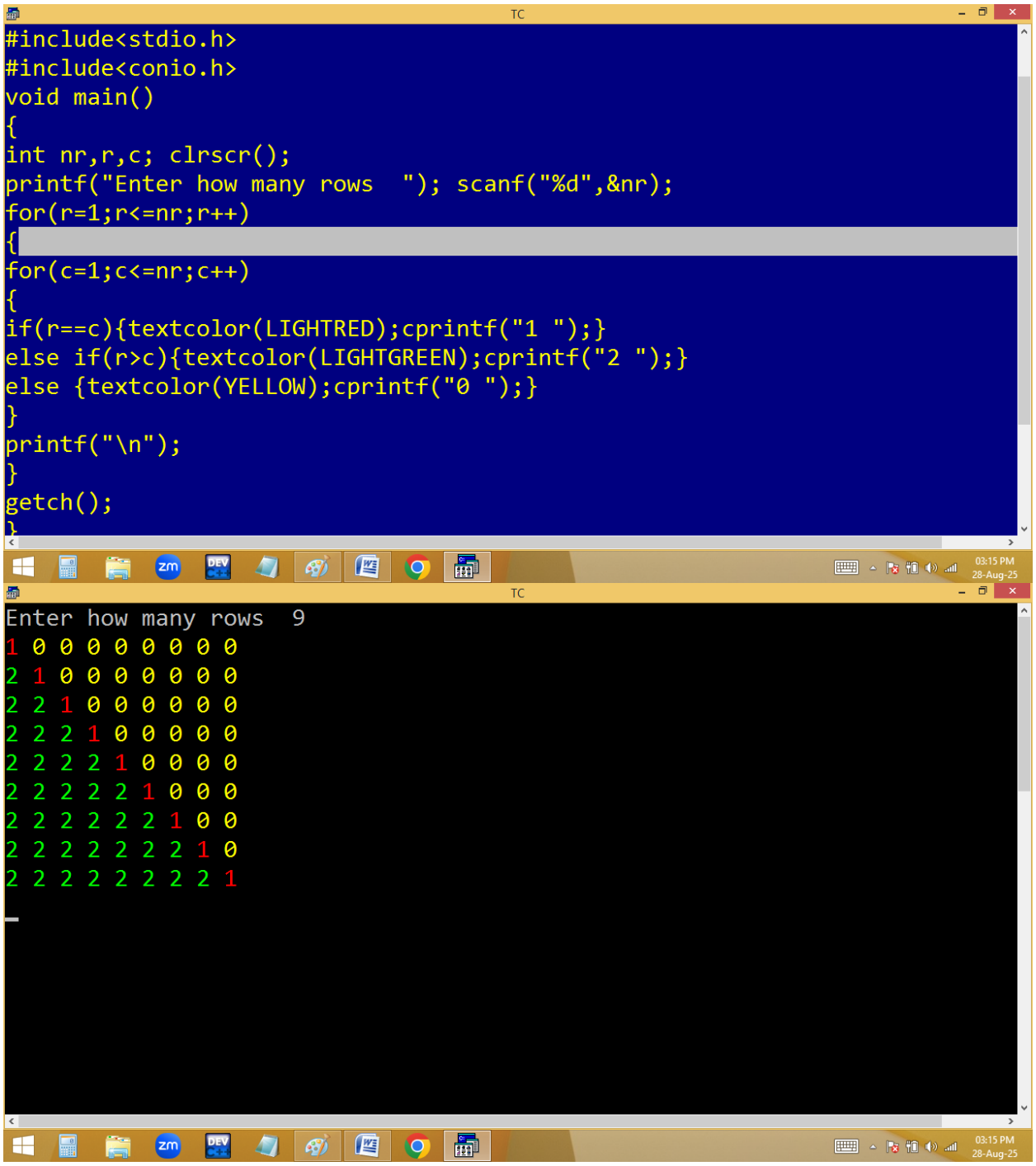

TC
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,r,c;
clrscr();
printf("Enter how many rows "); scanf("%d",&nr);
for(r=1;r<=nr;r++)
{
for(c=1;c<=nr;c++)
{
if(r==c)printf("1 ");else if(r>c)printf("2 ");else printf("0 ");
}
printf("\n");
}
getch();
}

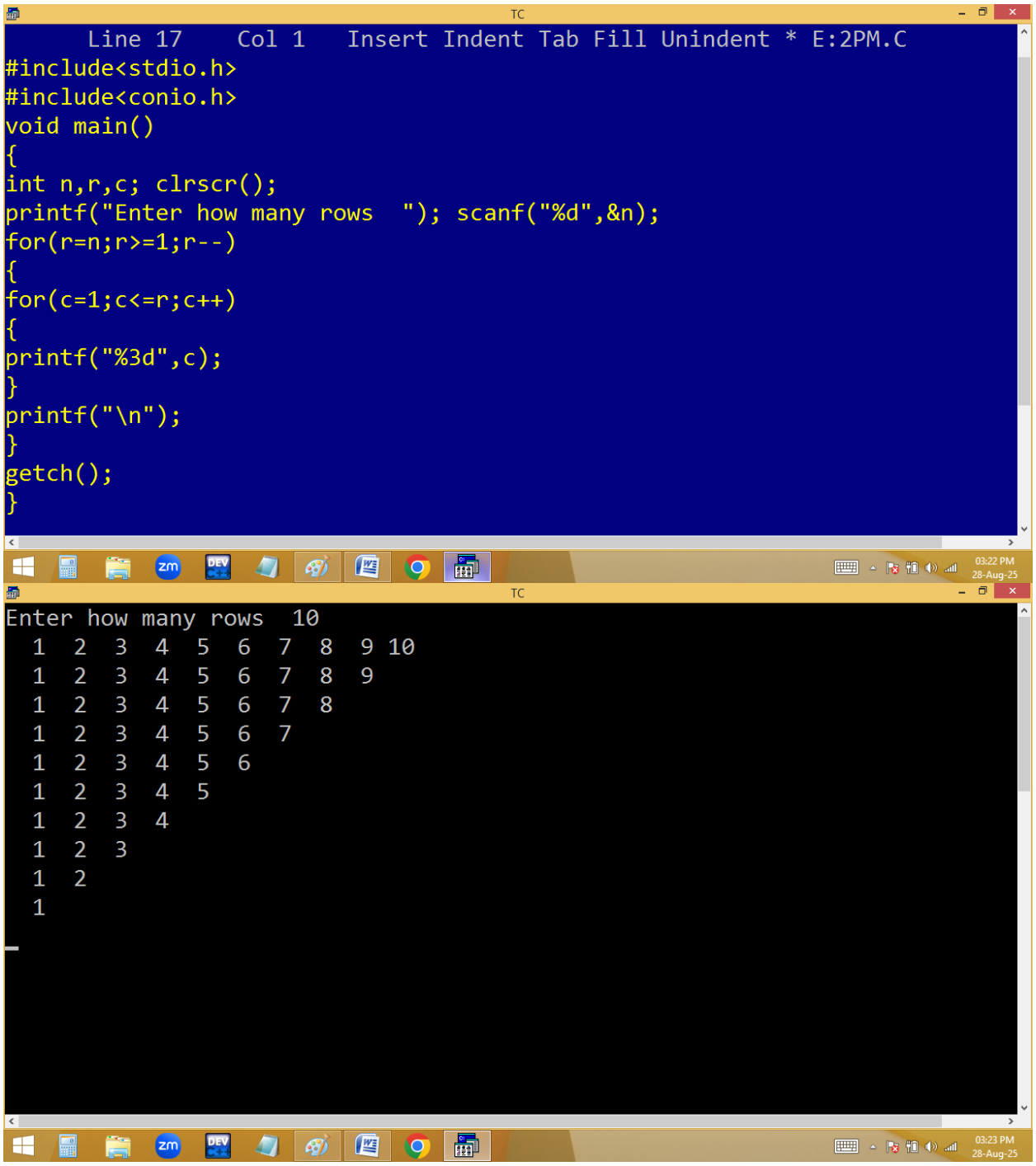

TC
Enter how many rows 9
1 0 0 0 0 0 0 0 0
2 1 0 0 0 0 0 0 0
2 2 1 0 0 0 0 0 0
2 2 2 1 0 0 0 0 0
2 2 2 2 1 0 0 0 0
2 2 2 2 2 1 0 0 0
2 2 2 2 2 2 1 0 0
2 2 2 2 2 2 2 1 0
2 2 2 2 2 2 2 2 1

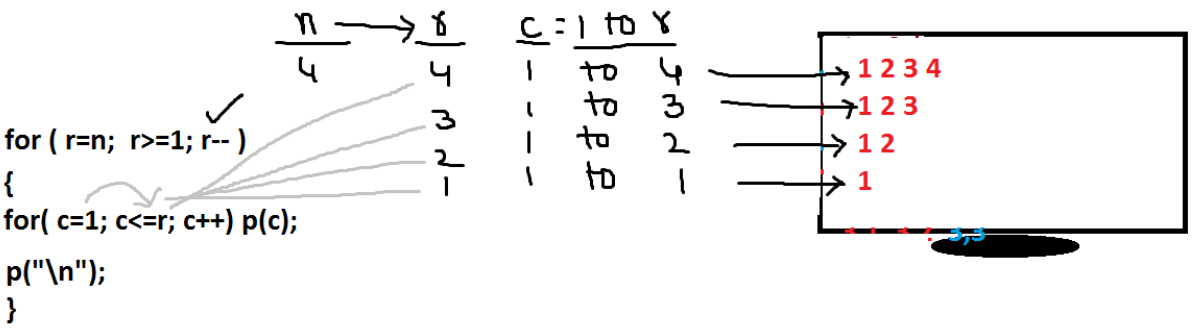
```
ch='A';
for( r=1; r<=4; r++ )
{
for( c=1; c<=4; c++)
{

if(r==c)p(1);else if(r>c)p(2);
else p(0);
}
printf("\n");
}
```



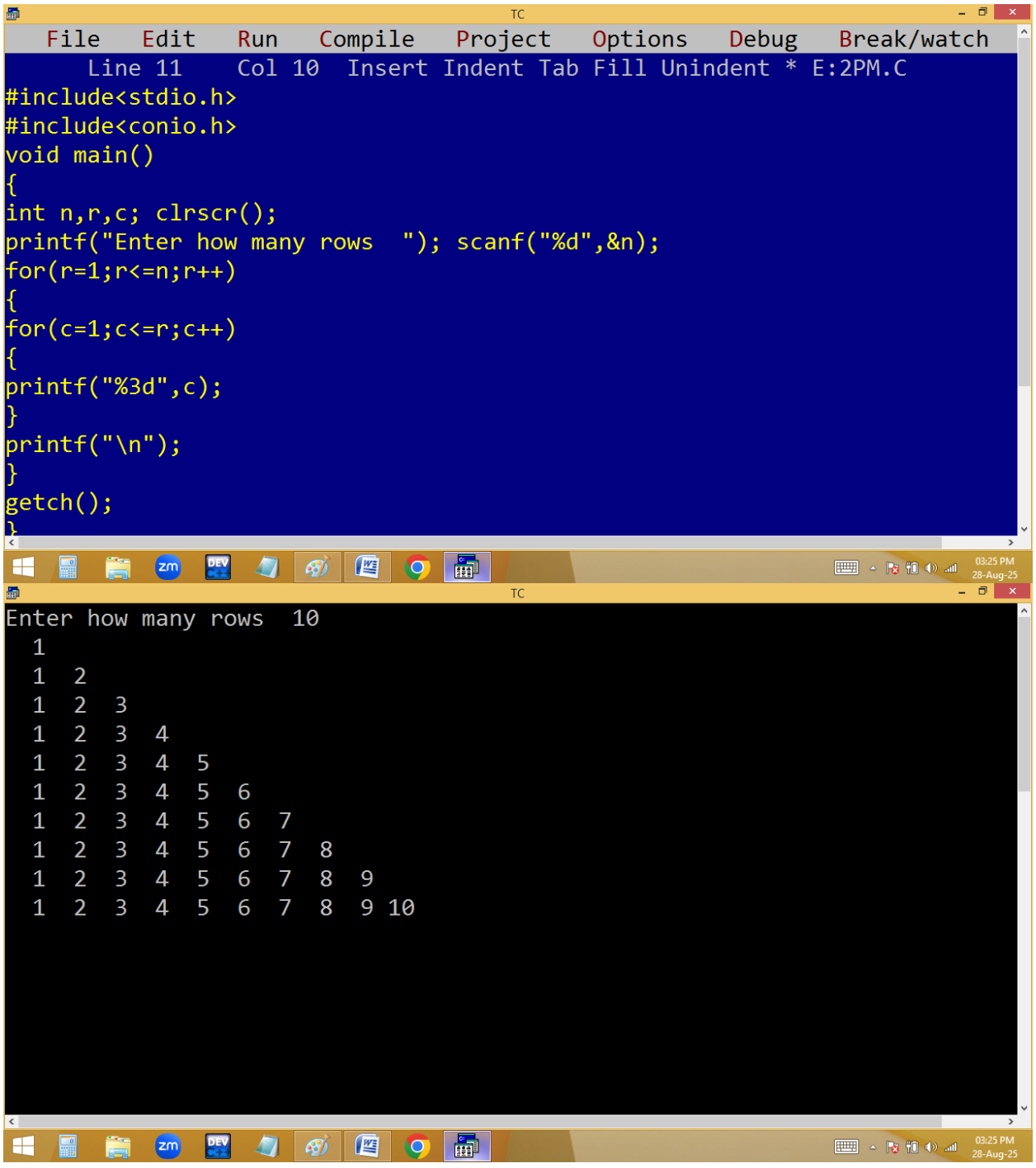


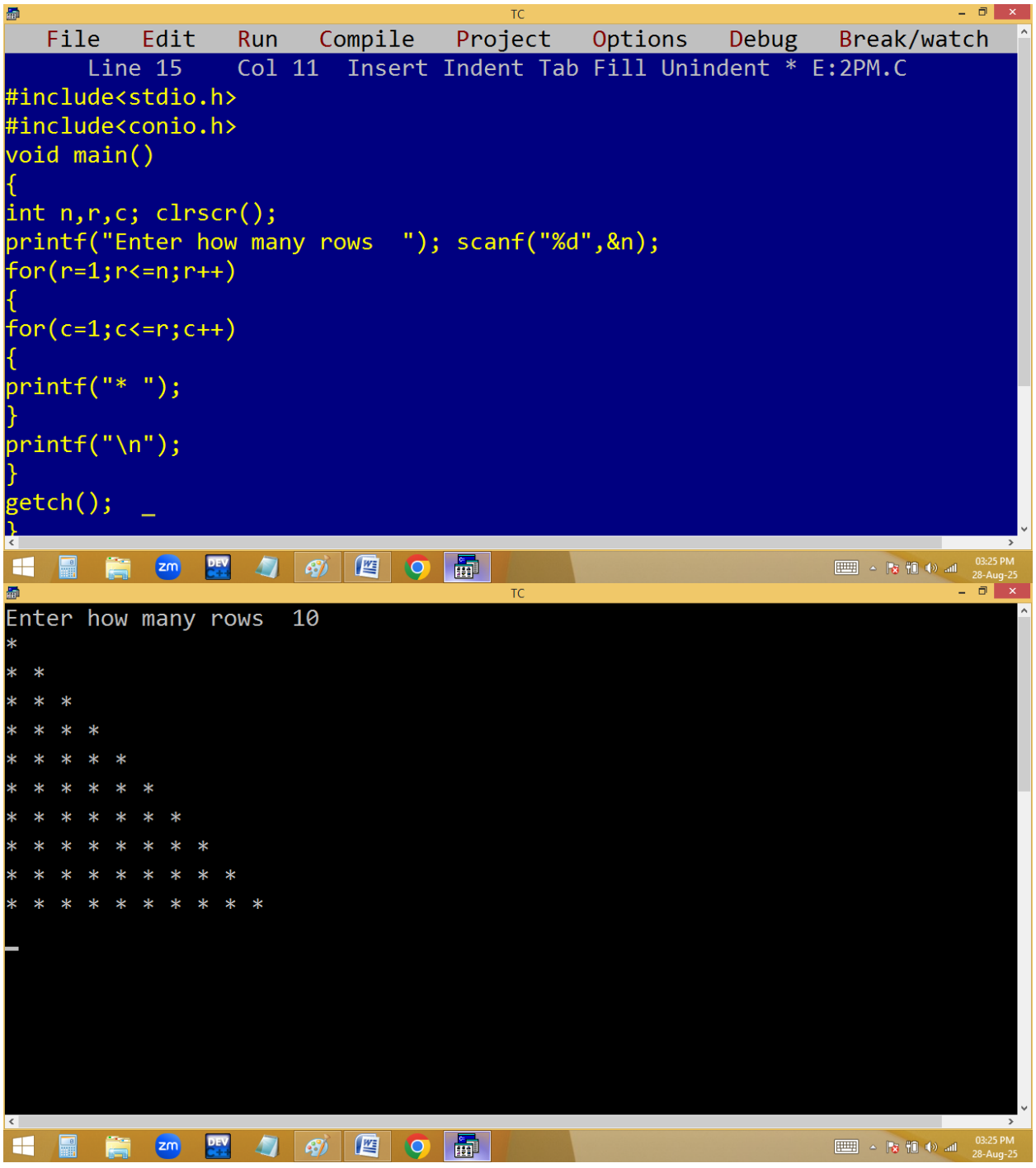

TC
#include<stdio.h>
#include<conio.h>
void main()
{
int nr,r,c; clrscr();
printf("Enter how many rows "); scanf("%d",&nr);
for(r=1;r<=nr;r++)
{
for(c=1;c<=nr;c++)
{
if(r==c){textcolor(LIGHTRED);cprintf("1 ");}
else if(r>c){textcolor(LIGHTGREEN);cprintf("2 ");}
else {textcolor(YELLOW);cprintf("0 ");}
}
printf("\n");
}
getch();
}
03:15 PM
28-Aug-25
TC
Enter how many rows 9
1 0 0 0 0 0 0 0 0
2 1 0 0 0 0 0 0 0
2 2 1 0 0 0 0 0 0
2 2 2 1 0 0 0 0 0
2 2 2 2 1 0 0 0 0
2 2 2 2 2 1 0 0 0
2 2 2 2 2 2 1 0 0
2 2 2 2 2 2 2 1 0
2 2 2 2 2 2 2 2 1
03:15 PM
28-Aug-25

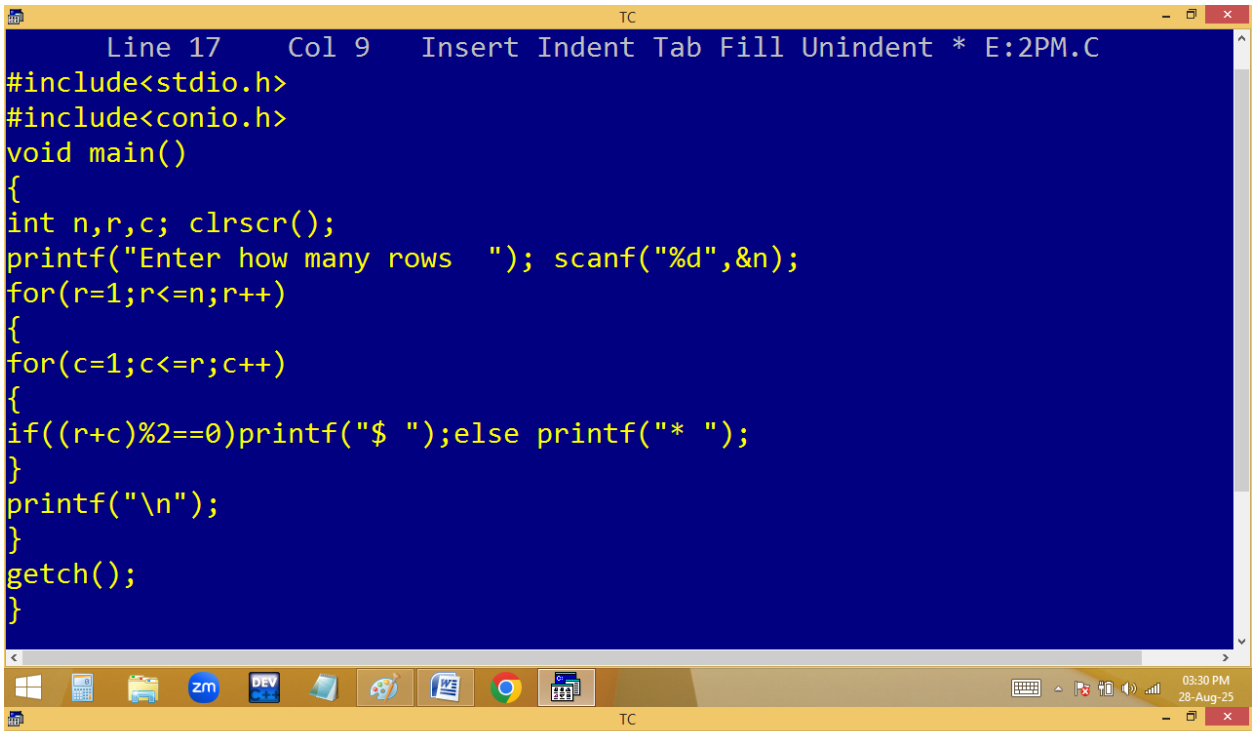

TC
Line 17 Col 1 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c; clrscr();
printf("Enter how many rows "); scanf("%d",&n);
for(r=n;r>=1;r--)
{
for(c=1;c<=r;c++)
{
printf("%3d",c);
}
printf("\n");
}
getch();
}
TC
Enter how many rows 10
1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7
1 2 3 4 5 6
1 2 3 4 5
1 2 3 4
1 2 3
1 2
1

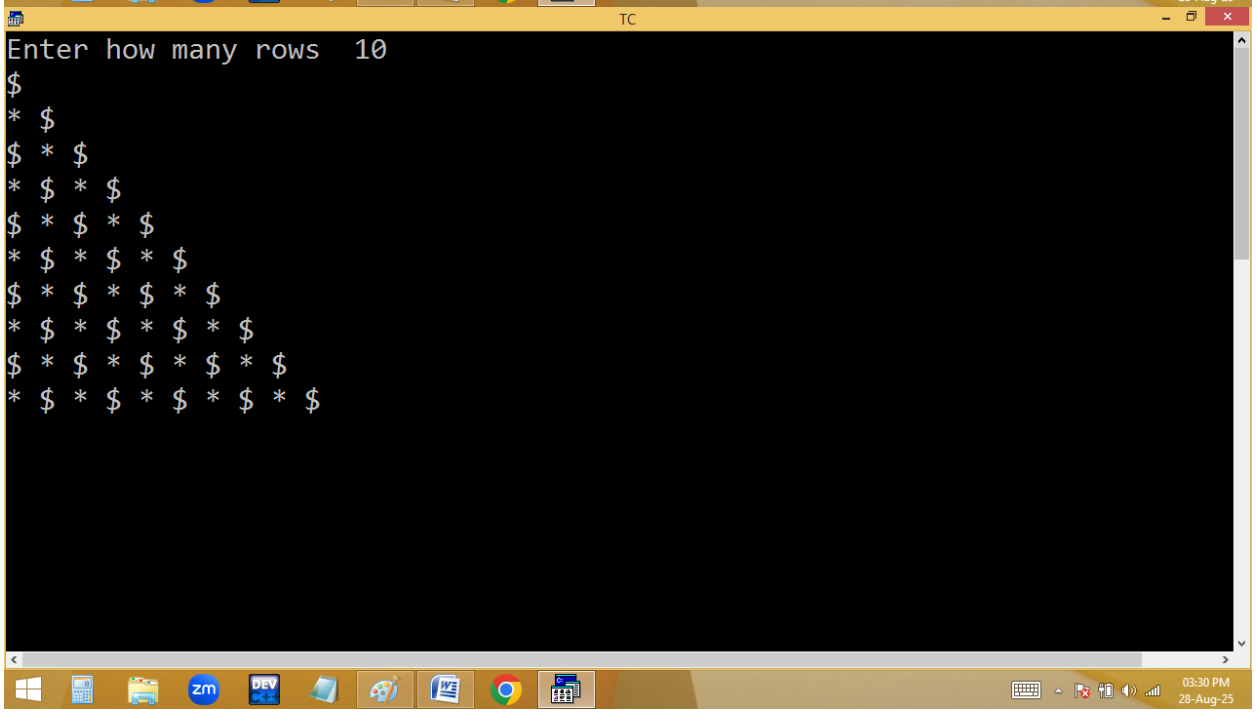


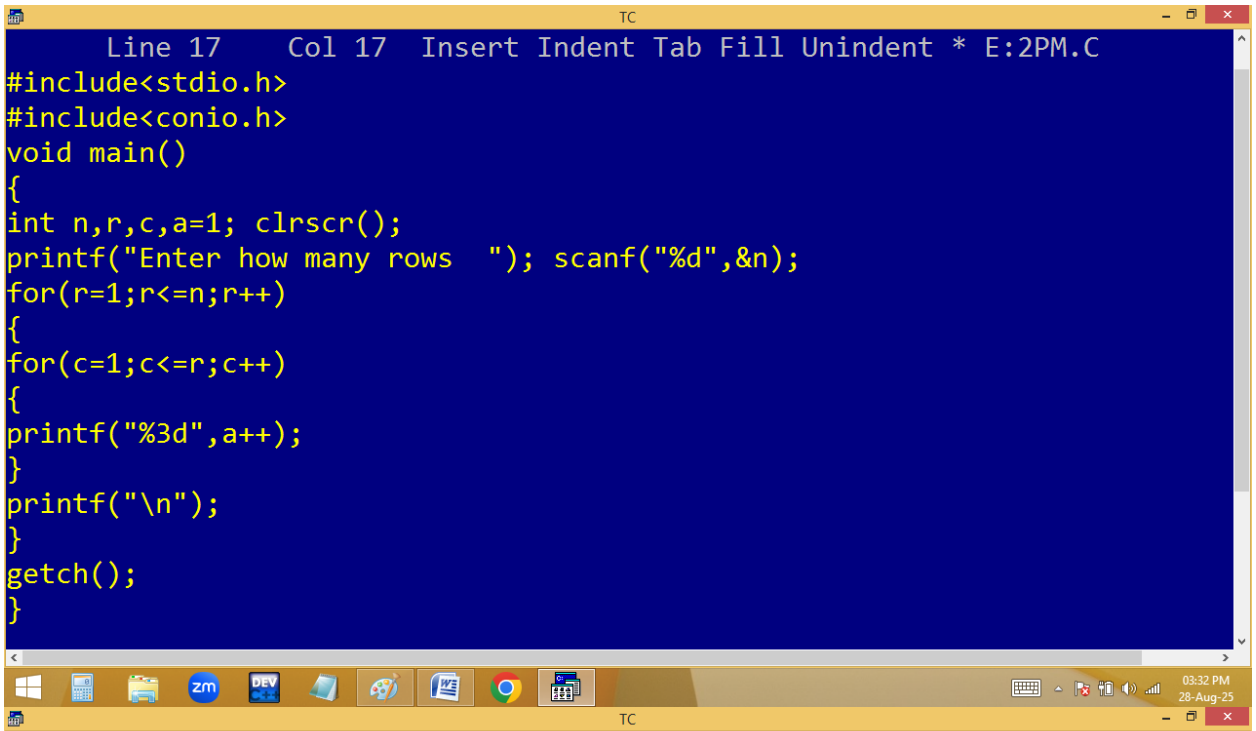

```
for ( r=n;  r>=1; r-- )
{
for( c=1; c<=r; c++) p(c);
p("\n");
}
```

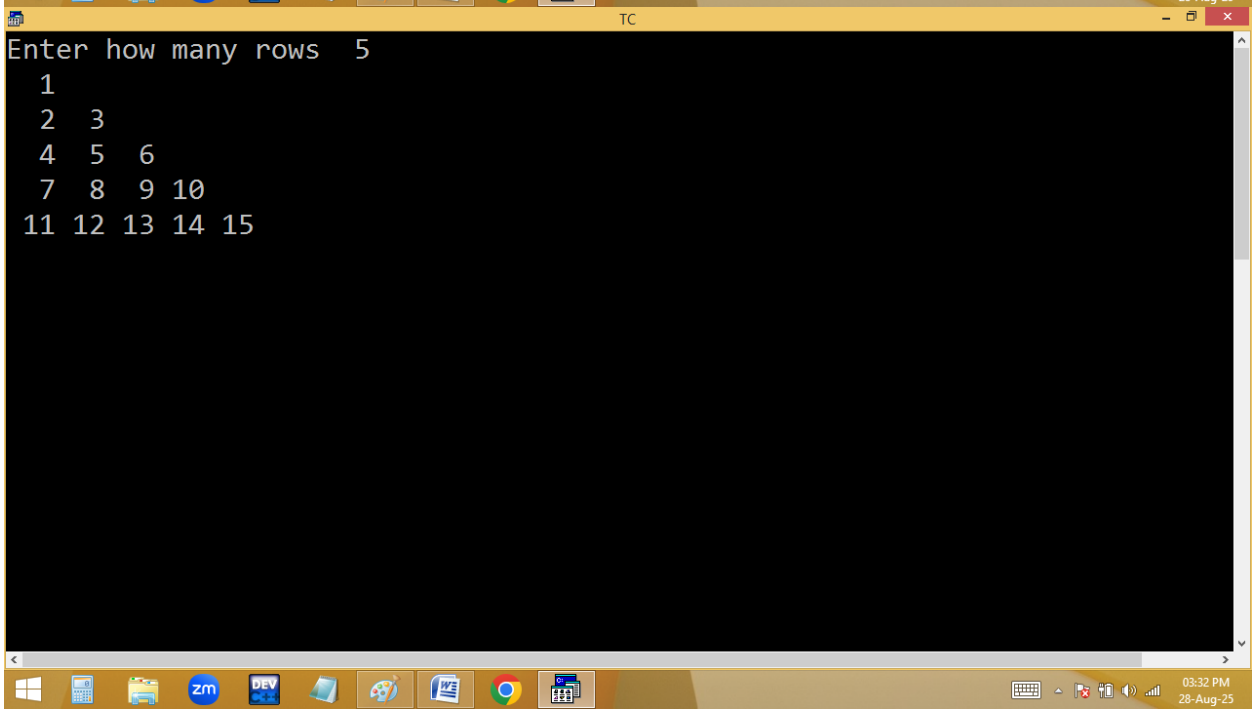

TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 10 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c; clrscr();
printf("Enter how many rows "); scanf("%d",&n);
for(r=1;r<=n;r++)
{
for(c=1;c<=r;c++)
{
printf("%3d",c);
}
printf("\n");
}
getch();
}
TC
Enter how many rows 10
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
1 2 3 4 5 6
1 2 3 4 5 6 7
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9
1 2 3 4 5 6 7 8 9 10

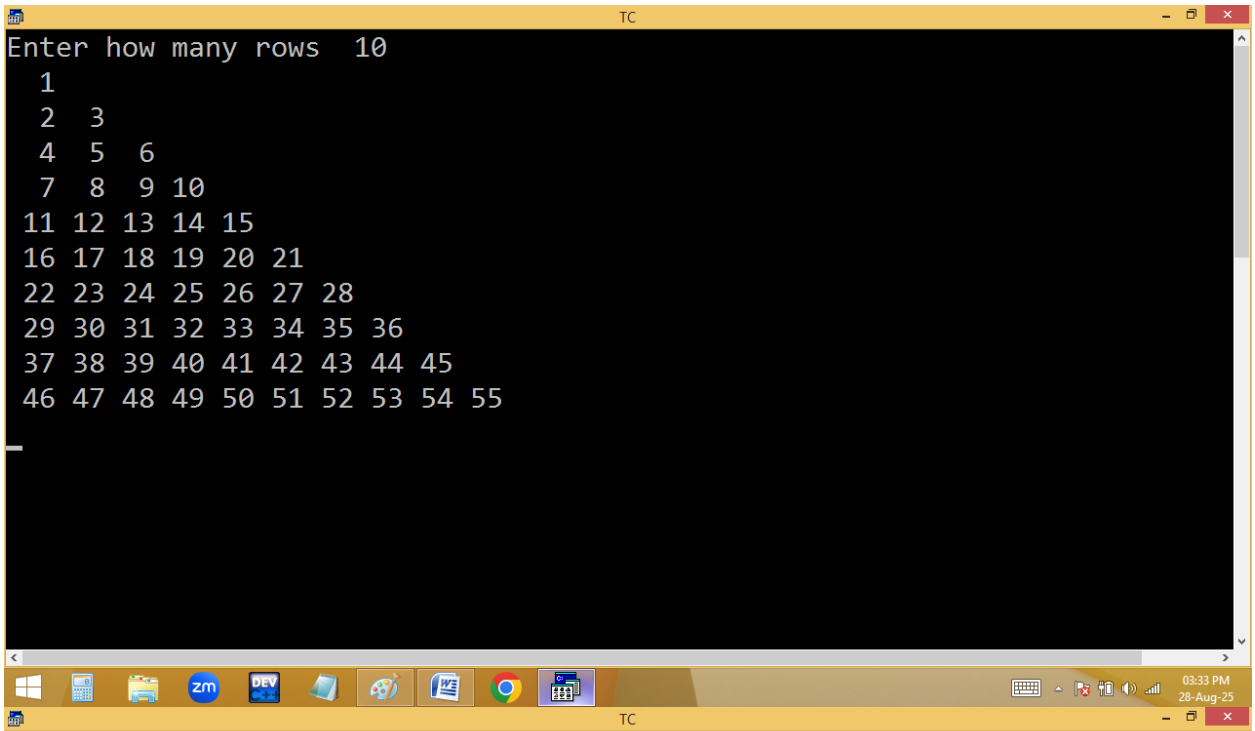

TC
File Edit Run Compile Project Options Debug Break/watch
Line 15 Col 11 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c; clrscr();
printf("Enter how many rows "); scanf("%d",&n);
for(r=1;r<=n;r++)
{
for(c=1;c<=r;c++)
{
printf("* ");
}
printf("\n");
}
getch();
}
03:25 PM
28-Aug-25
TC
Enter how many rows 10
*
* *
* * *
* * * *
* * * * *
* * * * * *
* * * * * * *
* * * * * * * *
* * * * * * * * *
* * * * * * * * * *
03:25 PM
28-Aug-25

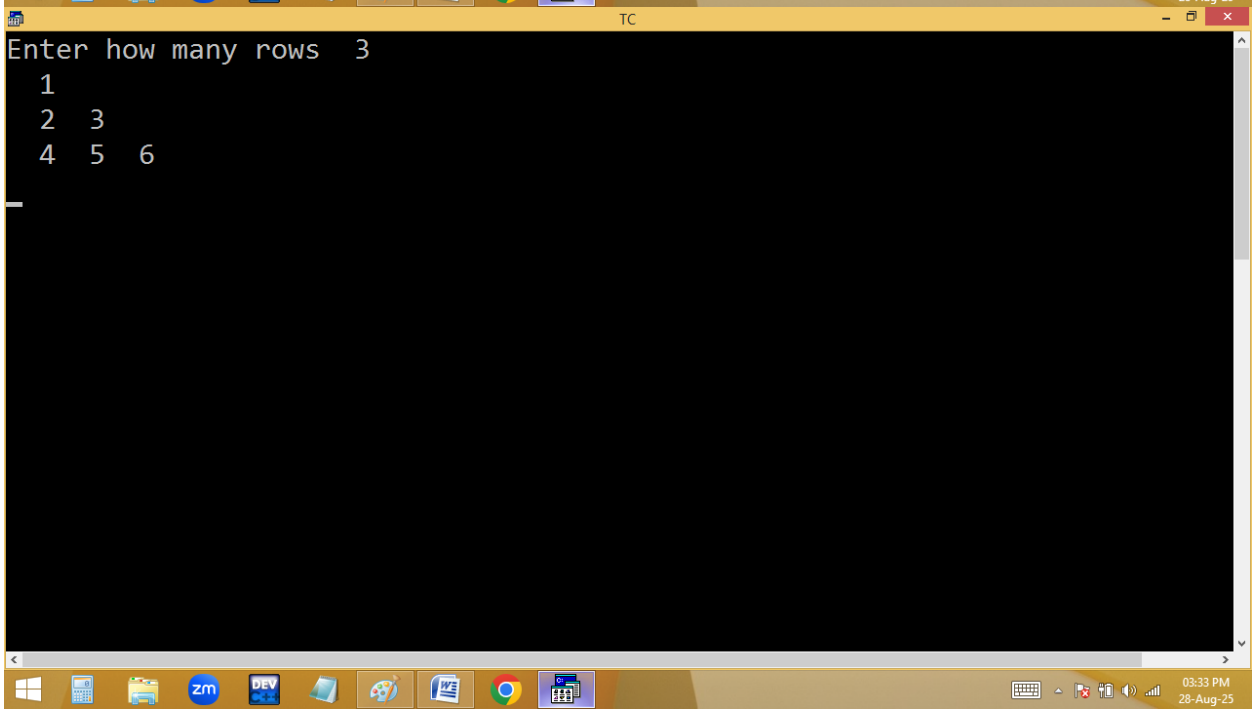

TC
Line 17 Col 9 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c; clrscr();
printf("Enter how many rows "); scanf("%d",&n);
for(r=1;r<=n;r++)
{
for(c=1;c<=r;c++)
{
if((r+c)%2==0)printf("$ ");else printf("* ");
}
printf("\n");
}
getch();
}


TC
Enter how many rows 10
$
* $
$ * $
* $ * $
$ * $ * $
* $ * $ * $
$ * $ * $ * $
* $ * $ * $ * $
$ * $ * $ * $ * $
* $ * $ * $ * $ * $

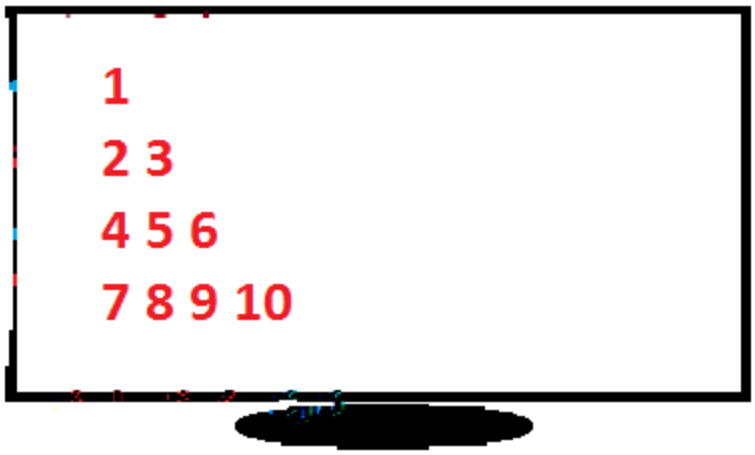

TC
Line 17 Col 17 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c,a=1; clrscr();
printf("Enter how many rows "); scanf("%d",&n);
for(r=1;r<=n;r++)
{
for(c=1;c<=r;c++)
{
printf("%3d",a++);
}
printf("\n");
}
getch();
}
03:32 PM
28-Aug-25

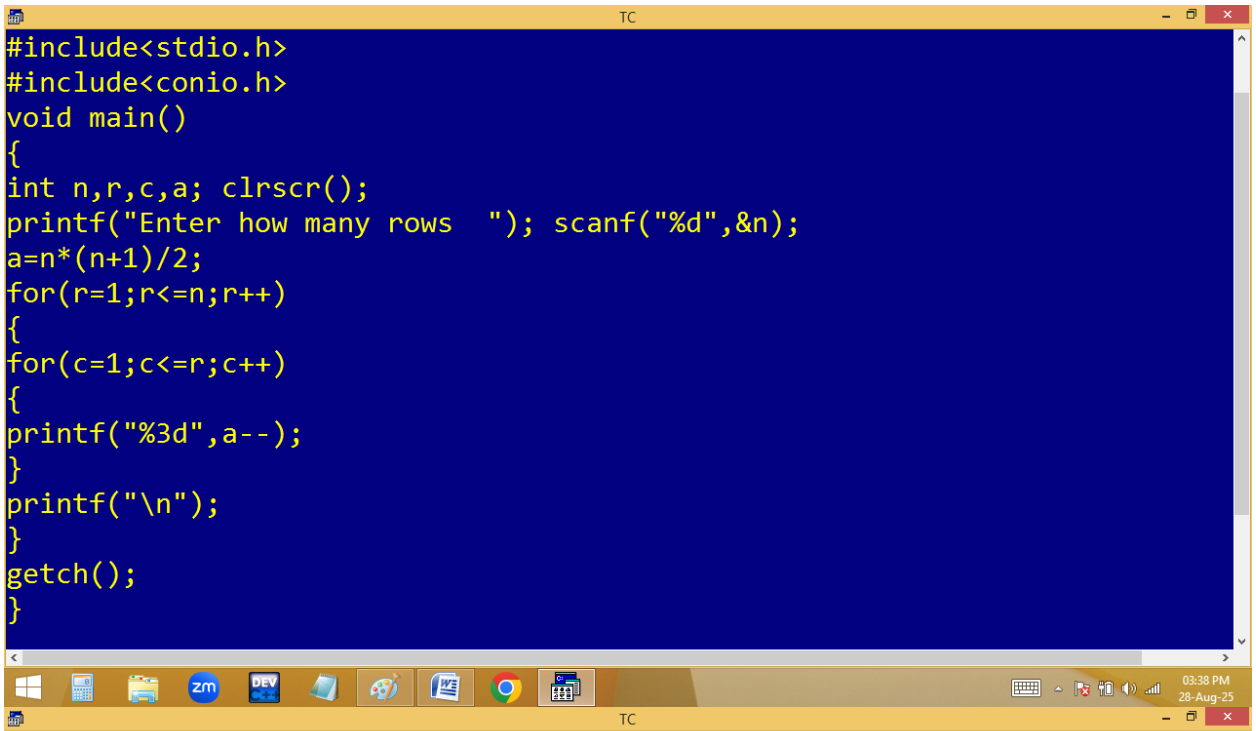

TC
Enter how many rows 5
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
03:32 PM
28-Aug-25

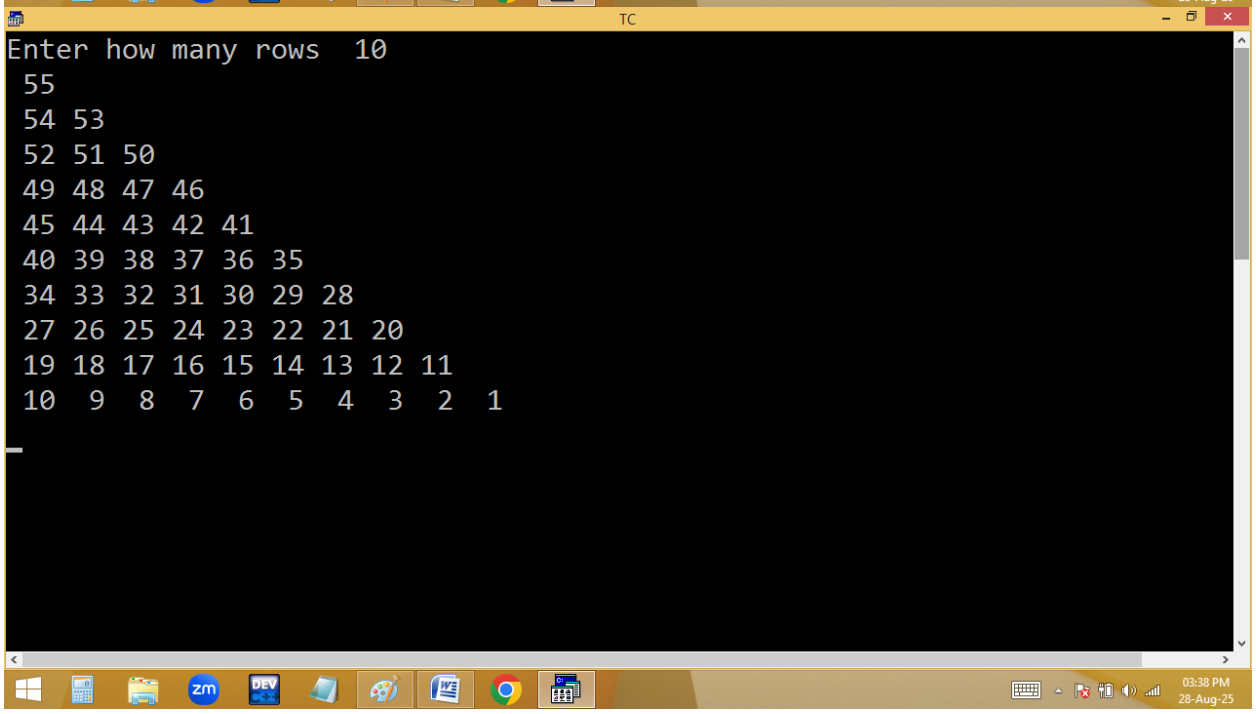

TC
Enter how many rows 10
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31 32 33 34 35 36
37 38 39 40 41 42 43 44 45
46 47 48 49 50 51 52 53 54 55
03:33 PM
28-Aug-25

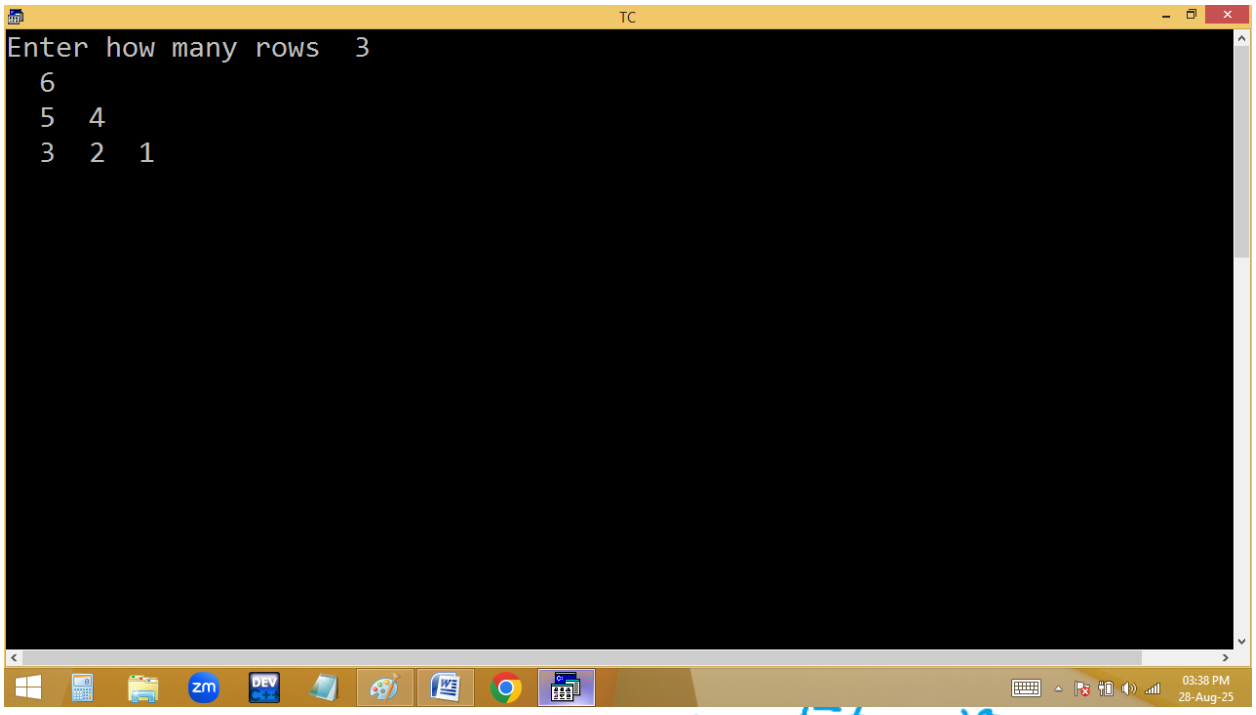

TC
Enter how many rows 3
1
2 3
4 5 6
03:33 PM
28-Aug-25

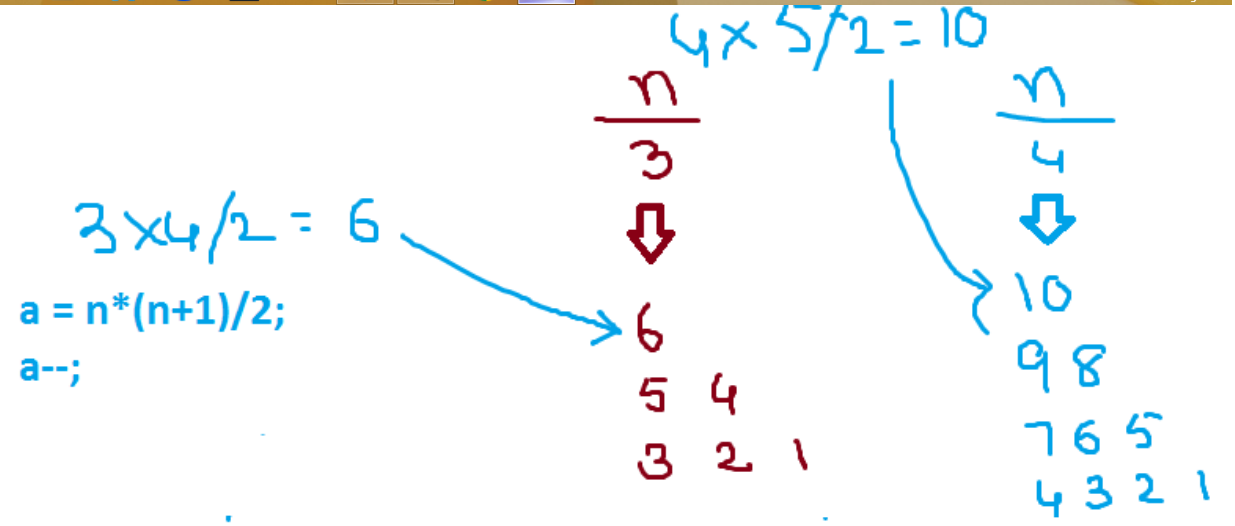
FLOYD'S TRIANGLE

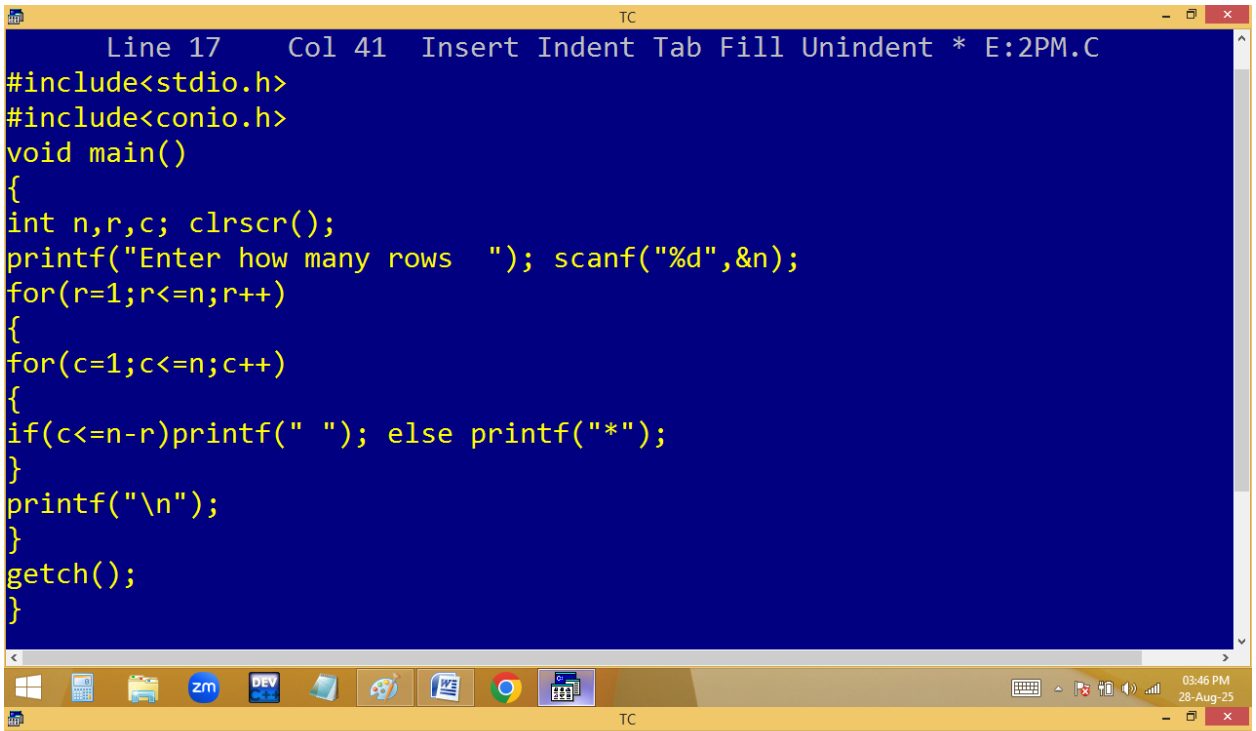


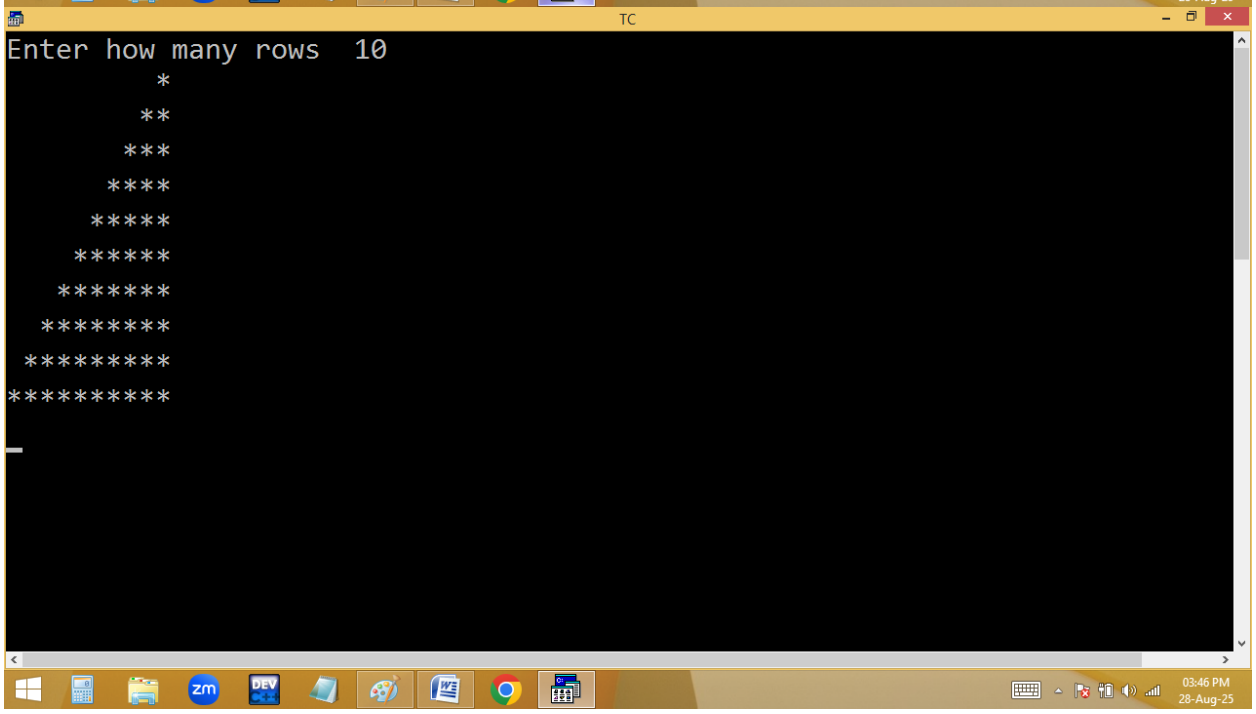

TC
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c,a; clrscr();
printf("Enter how many rows "); scanf("%d",&n);
a=n*(n+1)/2;
for(r=1;r<=n;r++)
{
for(c=1;c<=r;c++)
{
printf("%3d",a--);
}
printf("\n");
}
getch();
}


TC
Enter how many rows 10
 55
 54 53
 52 51 50
 49 48 47 46
 45 44 43 42 41
 40 39 38 37 36 35
 34 33 32 31 30 29 28
 27 26 25 24 23 22 21 20
 19 18 17 16 15 14 13 12 11
 10 9 8 7 6 5 4 3 2 1


TC
Enter how many rows 3
6
5 4
3 2 1

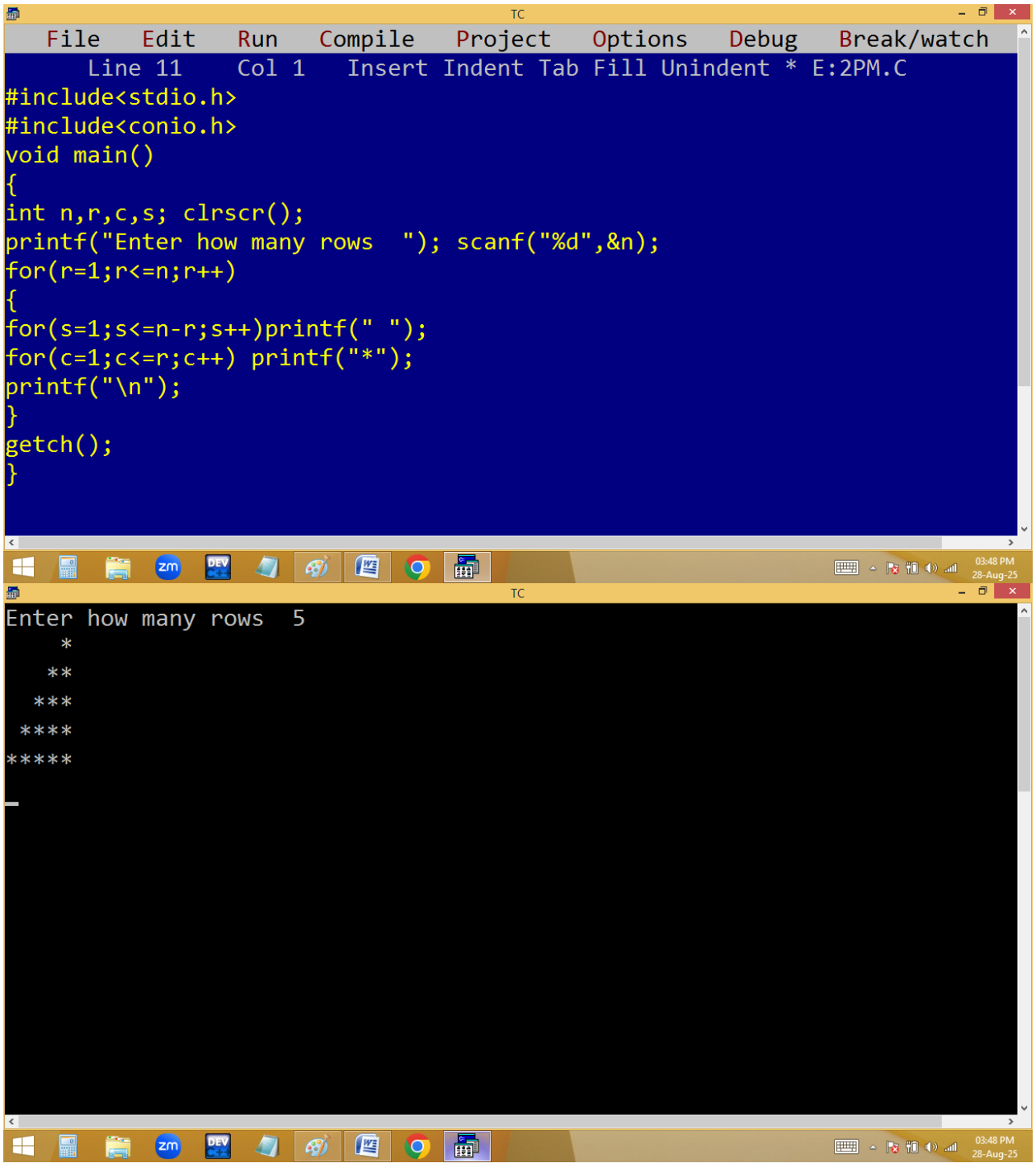

3x4/2 = 6
a = n*(n+1)/2;
a--;
n
3
6
5 4
3 2 1
4x5/2 = 10
n
4
10
9 8
7 6 5
4 3 2 1


TC
Line 17 Col 41 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c; clrscr();
printf("Enter how many rows "); scanf("%d",&n);
for(r=1;r<=n;r++)
{
for(c=1;c<=n;c++)
{
if(c<=n-r)printf(" "); else printf("*");
}
printf("\n");
}
getch();
}


TC
Enter how many rows 10
*
**
***
****
*****
******
****
****
****
****

```
for( r=1; r<=4; r++ )
{
for( c=1; c<=4; c++ )
{
if(c<=n-r)p(" ");else p(*);
}
p("\n");
}
```

n	r	" "	c=1 to r
4	1	3	1-1
4	2	2	1-2
4	3	1	1-3
4	4	0	1-4


TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 1 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c,s; clrscr();
printf("Enter how many rows "); scanf("%d",&n);
for(r=1;r<=n;r++)
{
for(s=1;s<=n-r;s++)printf(" ");
for(c=1;c<=r;c++) printf("*");
printf("\n");
}
getch();
}
03:48 PM
28-Aug-25
TC
Enter how many rows 5
*
**
***
****
*****
03:48 PM
28-Aug-25

```
for( r=1; r<=4; r++ )
{
for(s=1;s<=n-r;s++)p(" ");
for( c=1; c<=r ; c++ )
{
p(*);
}
p("\n");
}
```

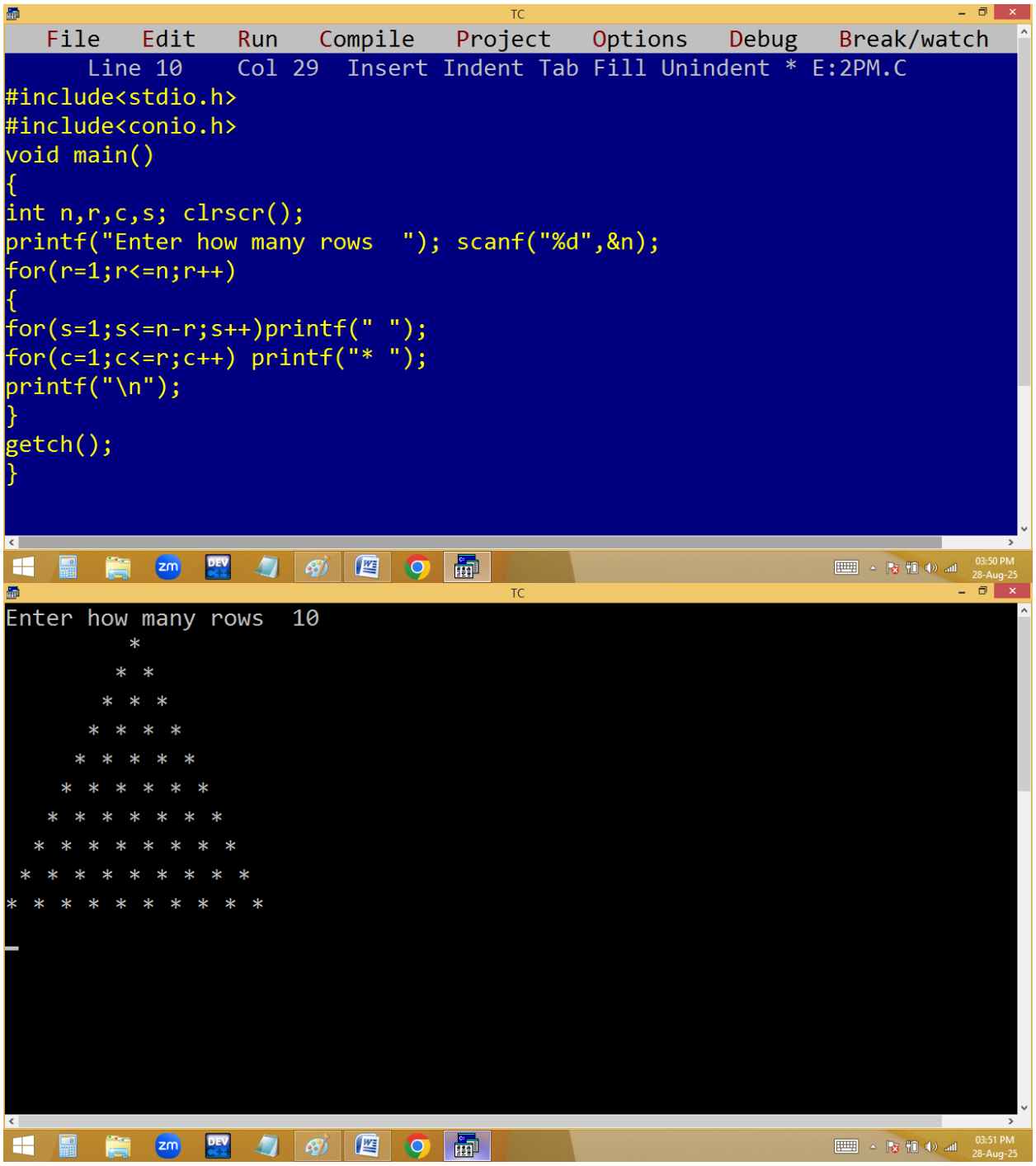
n r " " c=1 to r

4 − 1 = 3 1-1

4 − 2 = 2 1-2

4 − 3 = 1 1-3

4 − 4 = 0 1-4


TC
File Edit Run Compile Project Options Debug Break/watch
Line 10 Col 29 Insert Indent Tab Fill Unindent * E:2PM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c,s; clrscr();
printf("Enter how many rows "); scanf("%d",&n);
for(r=1;r<=n;r++)
{
for(s=1;s<=n-r;s++)printf(" ");
for(c=1;c<=r;c++) printf("* ");
printf("\n");
}
getch();
}
03:50 PM
28-Aug-25
TC
Enter how many rows 10
*
* *
* * *
* * * *
* * * * *
* * * * * *
* * * * * * *
* * * * * * * *
* * * * * * * * *
* * * * * * * * * *
03:51 PM
28-Aug-25