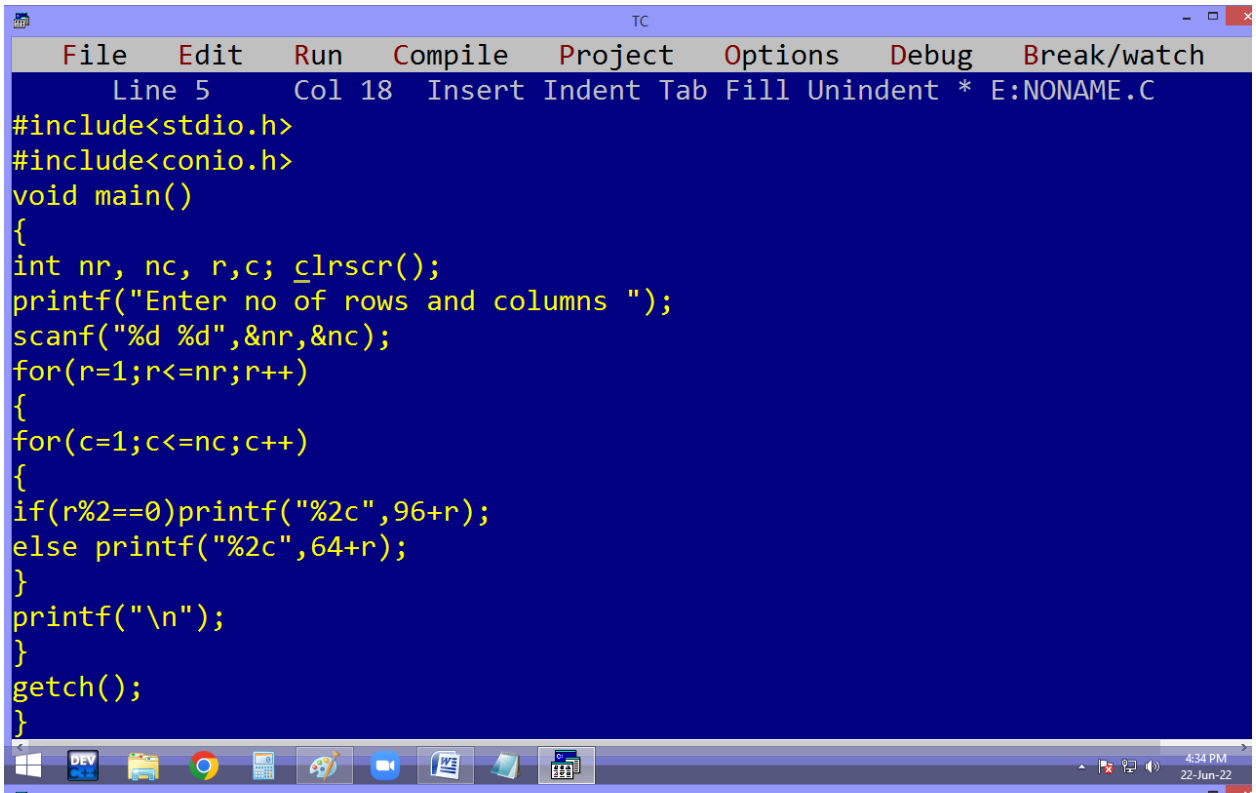
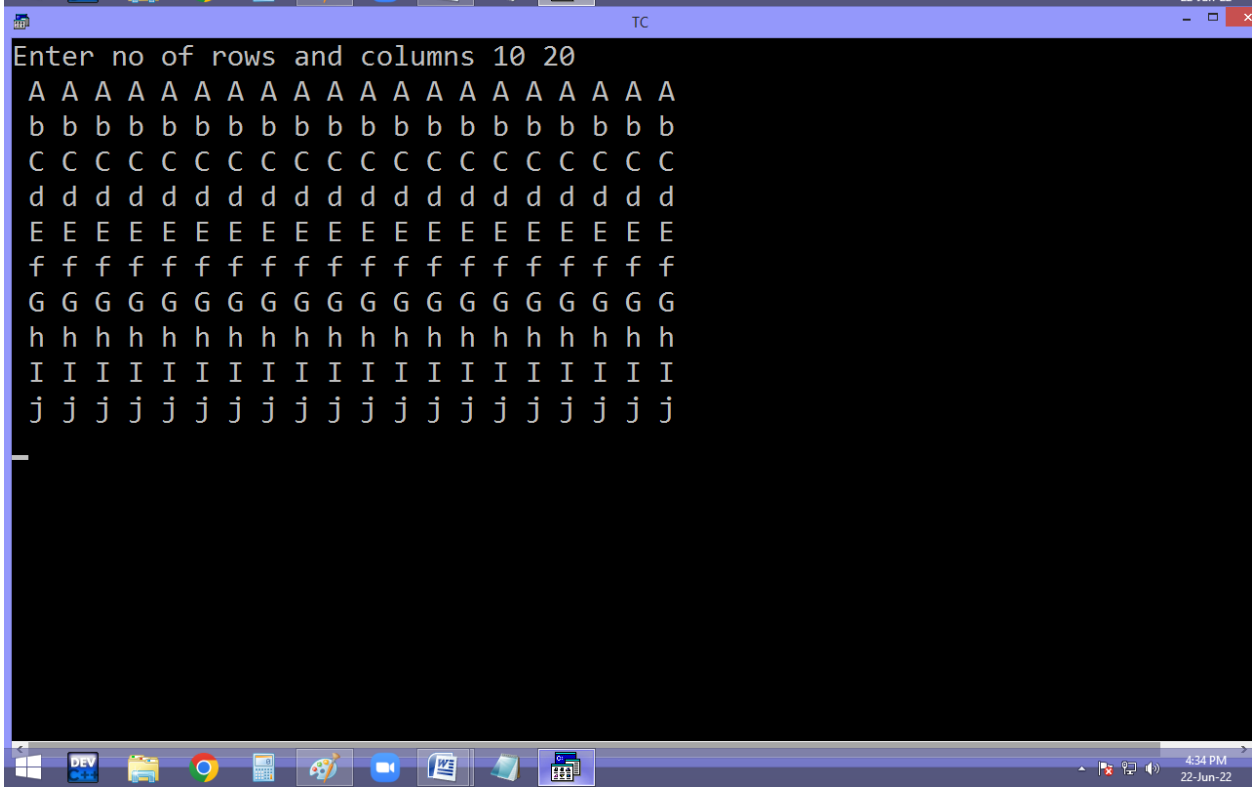
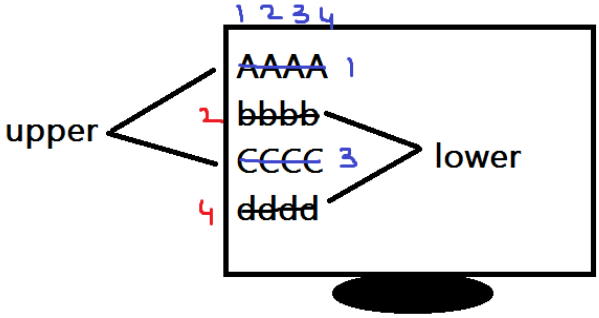
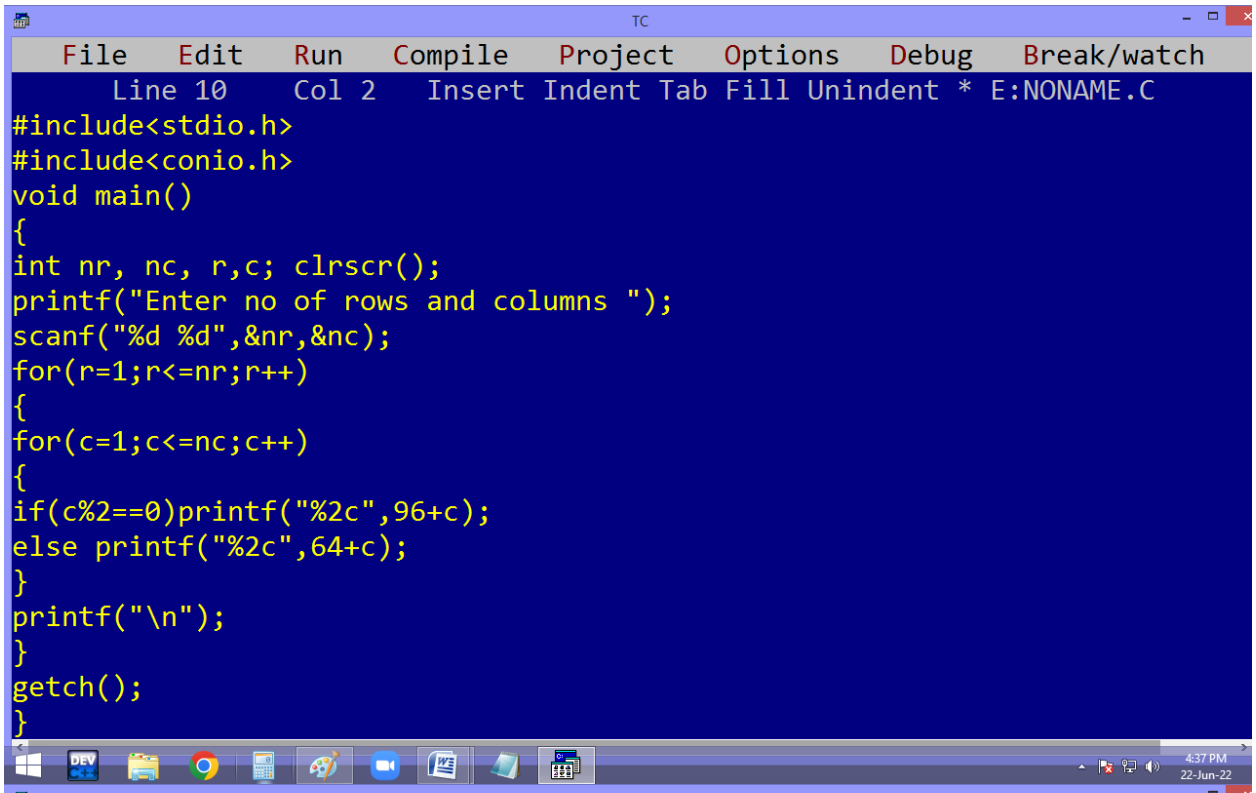
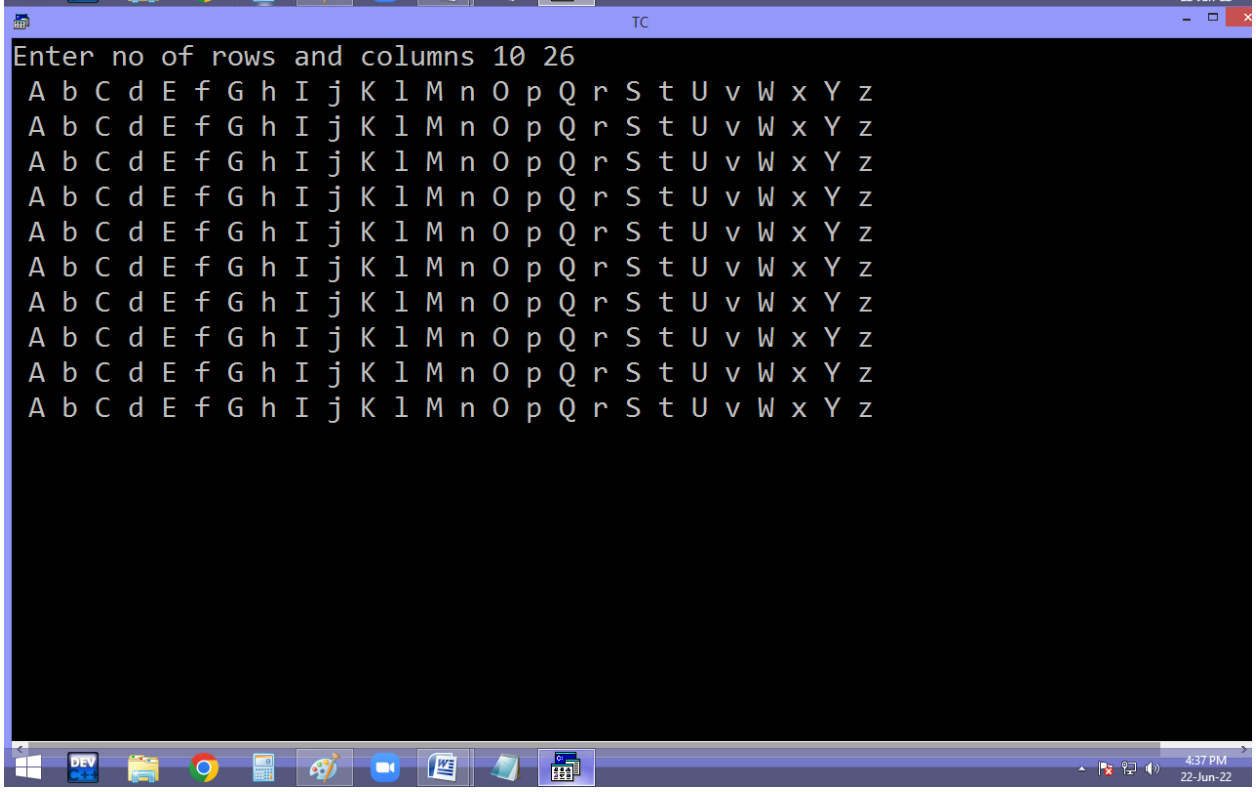

TC
File Edit Run Compile Project Options Debug Break/watch
Line 5 Col 18 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int nr, nc, r,c; clrscr();
printf("Enter no of rows and columns ");
scanf("%d %d",&nr,&nc);
for(r=1;r<=nr;r++)
{
for(c=1;c<=nc;c++)
{
if(r%2==0)printf("%2c",96+r);
else printf("%2c",64+r);
}
printf("\n");
}
getch();
}


TC
Enter no of 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

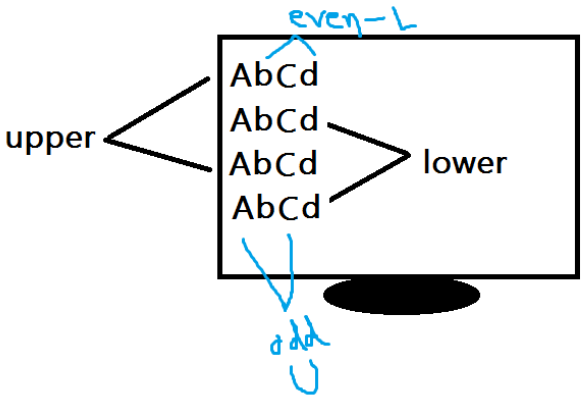
```
for(r=1;r<=4;r++)
{
for(c=1;c<=4;c++)
{
if(r%2==0)p(96+r); else p(64+r);
}
p("\n");
}
```




TC
File Edit Run Compile Project Options Debug Break/watch
Line 10 Col 2 Insert Indent Tab Fill Unindent * E:NONAME.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++)
{
if(c%2==0)printf("%2c",96+c);
else printf("%2c",64+c);
}
printf("\n");
}
getch();
}


TC
Enter no of 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(c%2==0)p(96+c); else p(64+c);
}
p("\n");
}
```



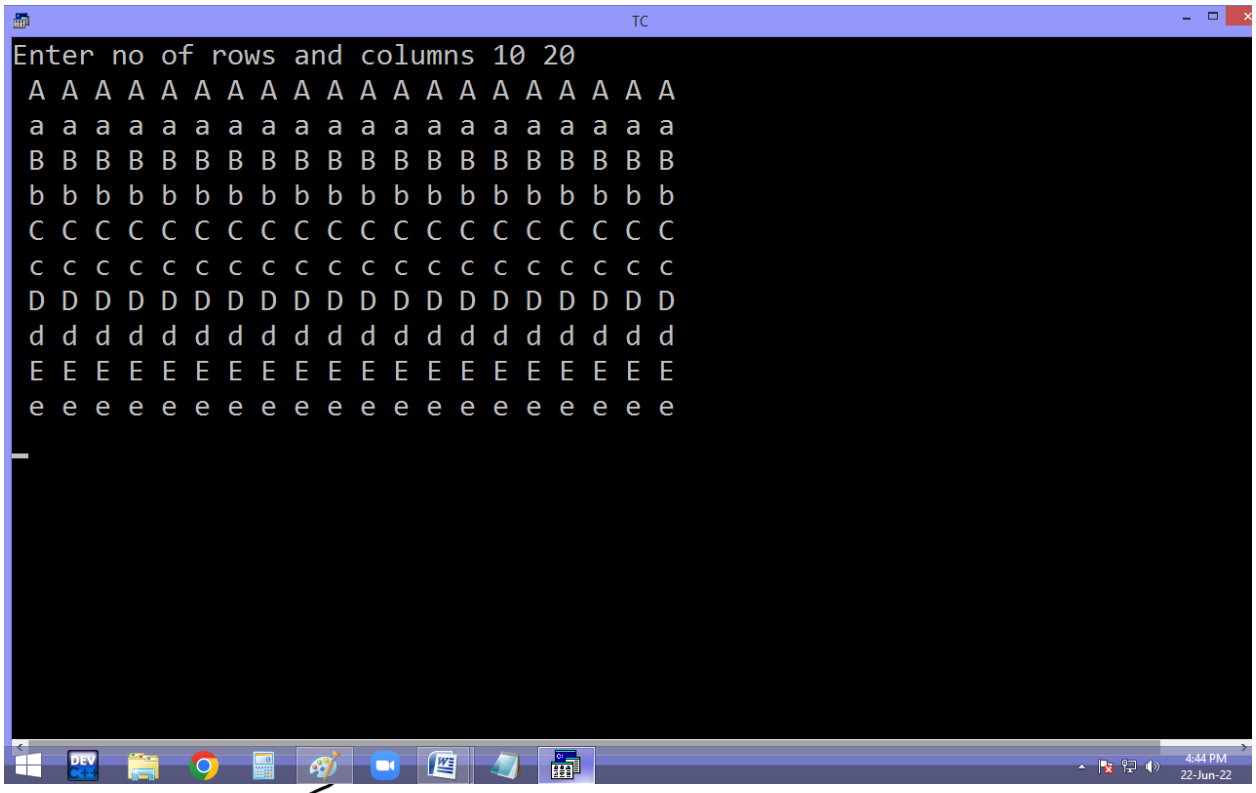

TC

File Edit Run Compile Project Options Debug Break/watch

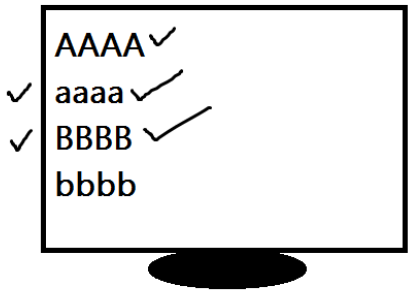
Line 12 Col 5 Insert Indent Tab Fill Unindent * E:NONAME.C

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

4:44 PM
22-Jun-22

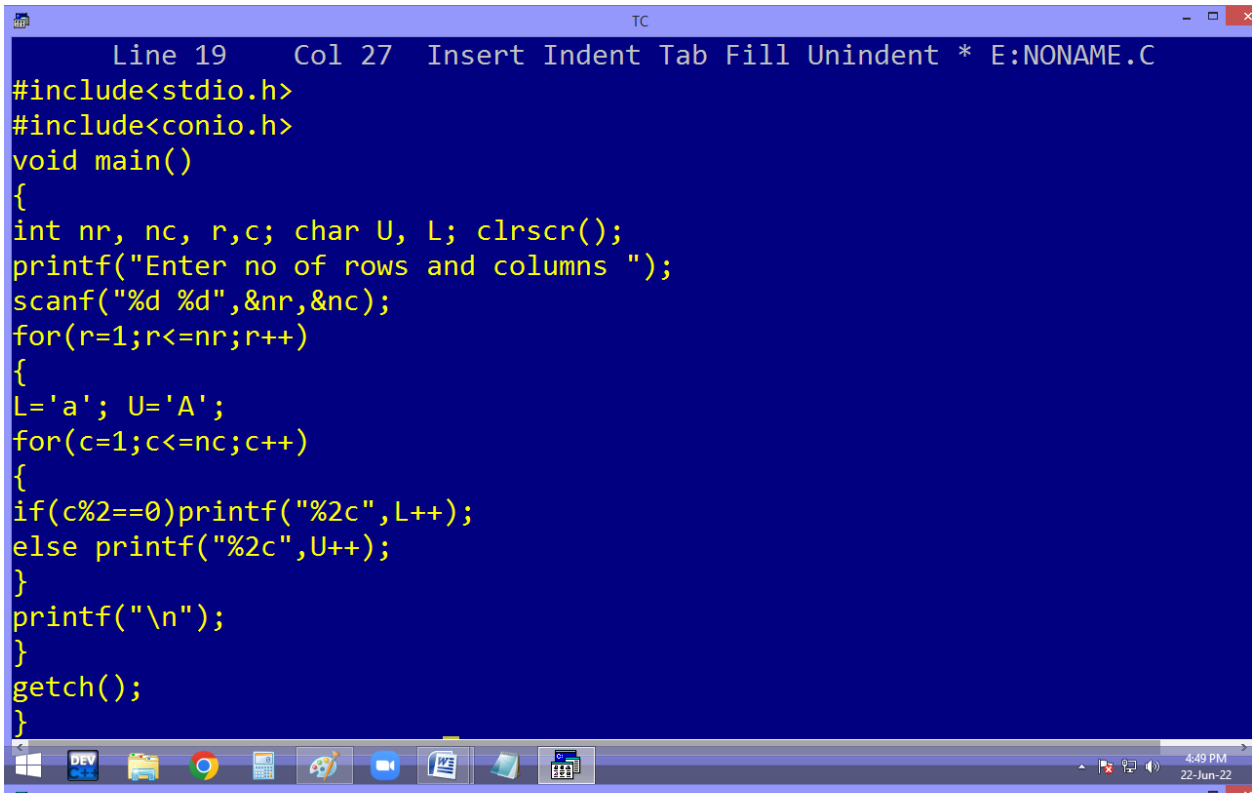


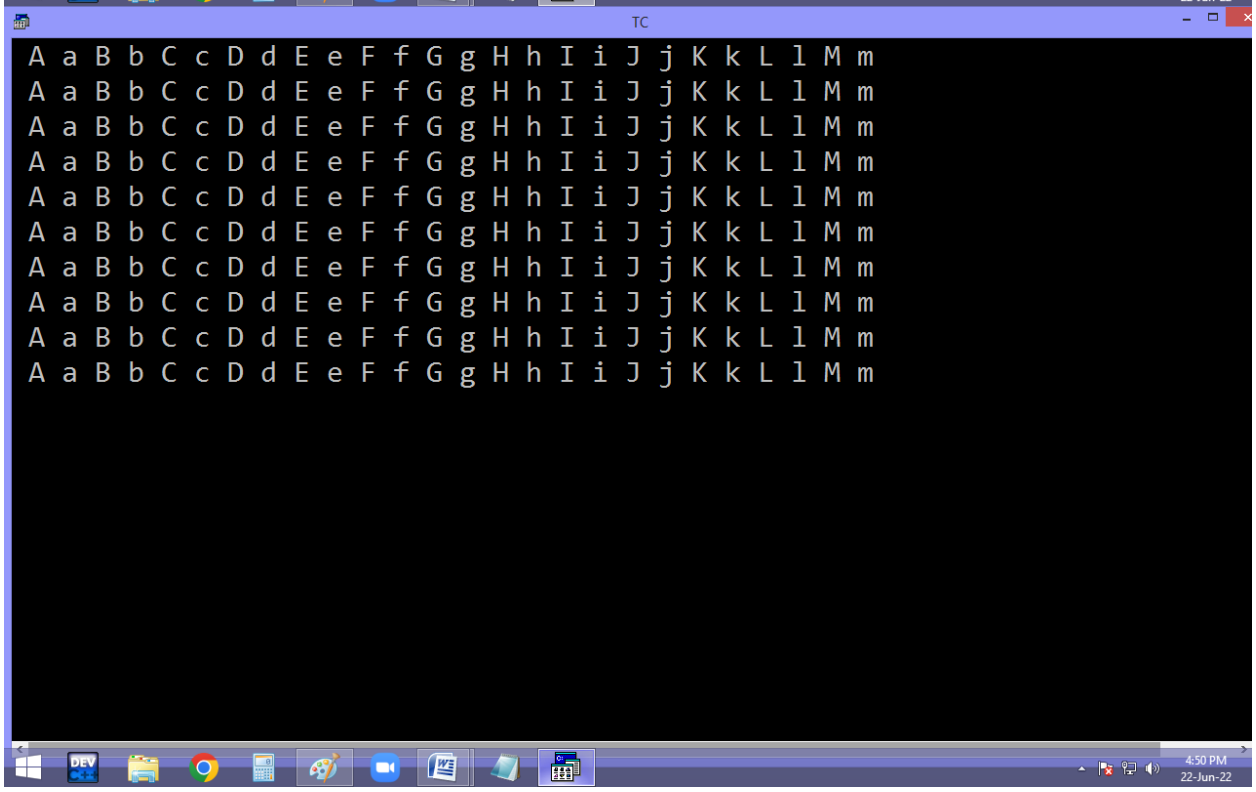

```
for(r=1;r<=4;r++)
{
for(c=1;c<=4;c++)
{
if(r%2==0)p( L ); else p( U );
}
p("\n"); if(r%2==0)L++; else U++;
}
```



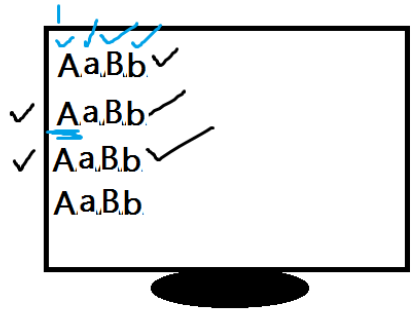

| U | L |
|---|---|
| A | a |
| B | b |

| r |
|---|
| 1 |
| 2 |
| 3 |
| 4 |


TC
Line 19 Col 27 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int nr, nc, r,c; char U, L; clrscr();
printf("Enter no of rows and columns ");
scanf("%d %d",&nr,&nc);
for(r=1;r<=nr;r++)
{
L='a'; U='A';
for(c=1;c<=nc;c++)
{
if(c%2==0)printf("%2c",L++);
else printf("%2c",U++);
}
printf("\n");
}
getch();
}
4:49 PM
22-Jun-22

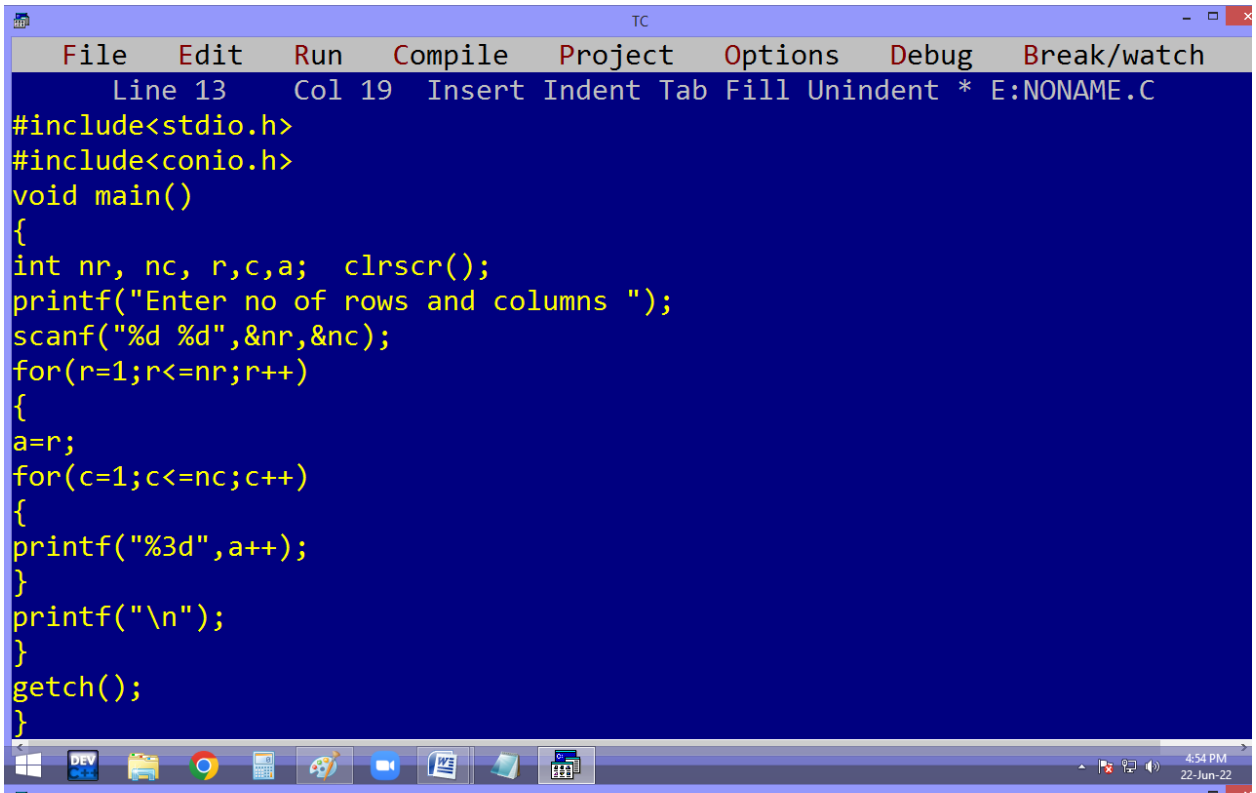

TC
A a B b C c D d E e F f G g H h I i J j K k L l M m
A a B b C c D d E e F f G g H h I i J j K k L l M m
A a B b C c D d E e F f G g H h I i J j K k L l M m
A a B b C c D d E e F f G g H h I i J j K k L l M m
A a B b C c D d E e F f G g H h I i J j K k L l M m
A a B b C c D d E e F f G g H h I i J j K k L l M m
A a B b C c D d E e F f G g H h I i J j K k L l M m
A a B b C c D d E e F f G g H h I i J j K k L l M m
A a B b C c D d E e F f G g H h I i J j K k L l M m
A a B b C c D d E e F f G g H h I i J j K k L l M m
4:50 PM
22-Jun-22

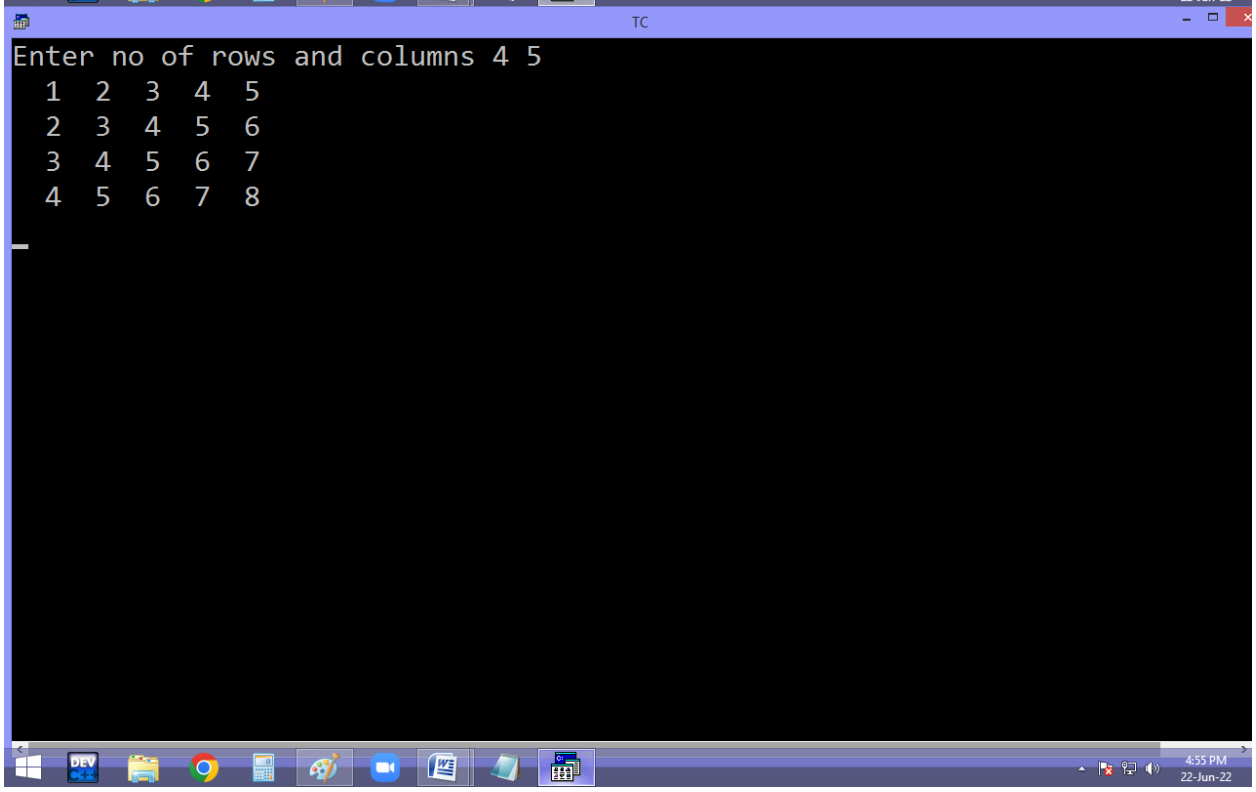
```
for(r=1;r<=4;r++)
{  L ='a'; U='A';
for(c=1;c<=4;c++)
{
if(c%2==0)p(  L++); else p(  U++);
}
p("\n");  if(r%2==0)L++; else U++;
}
```



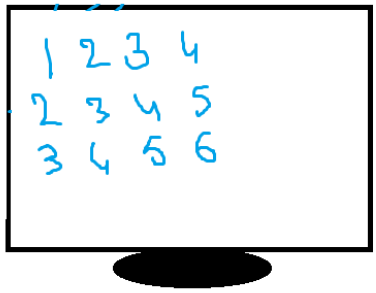

| U | L |
|---|---|
| A | a |
| B | b |

| r |
|---|
| 1 |
| 2 |
| 3 |
| 4 |

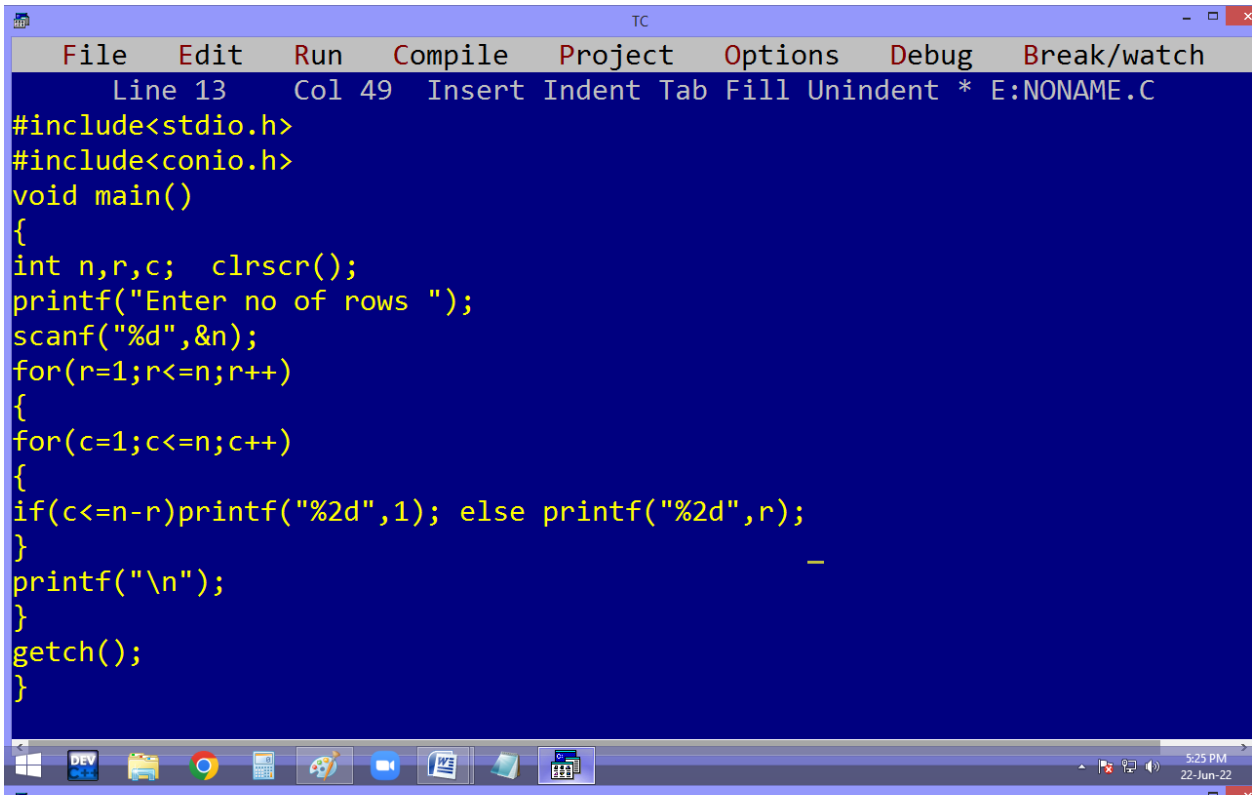

TC
File Edit Run Compile Project Options Debug Break/watch
Line 13 Col 19 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int nr, nc, r,c,a; clrscr();
printf("Enter no of rows and columns ");
scanf("%d %d",&nr,&nc);
for(r=1;r<=nr;r++)
{
a=r;
for(c=1;c<=nc;c++)
{
printf("%3d",a++);
}
printf("\n");
}
getch();
}

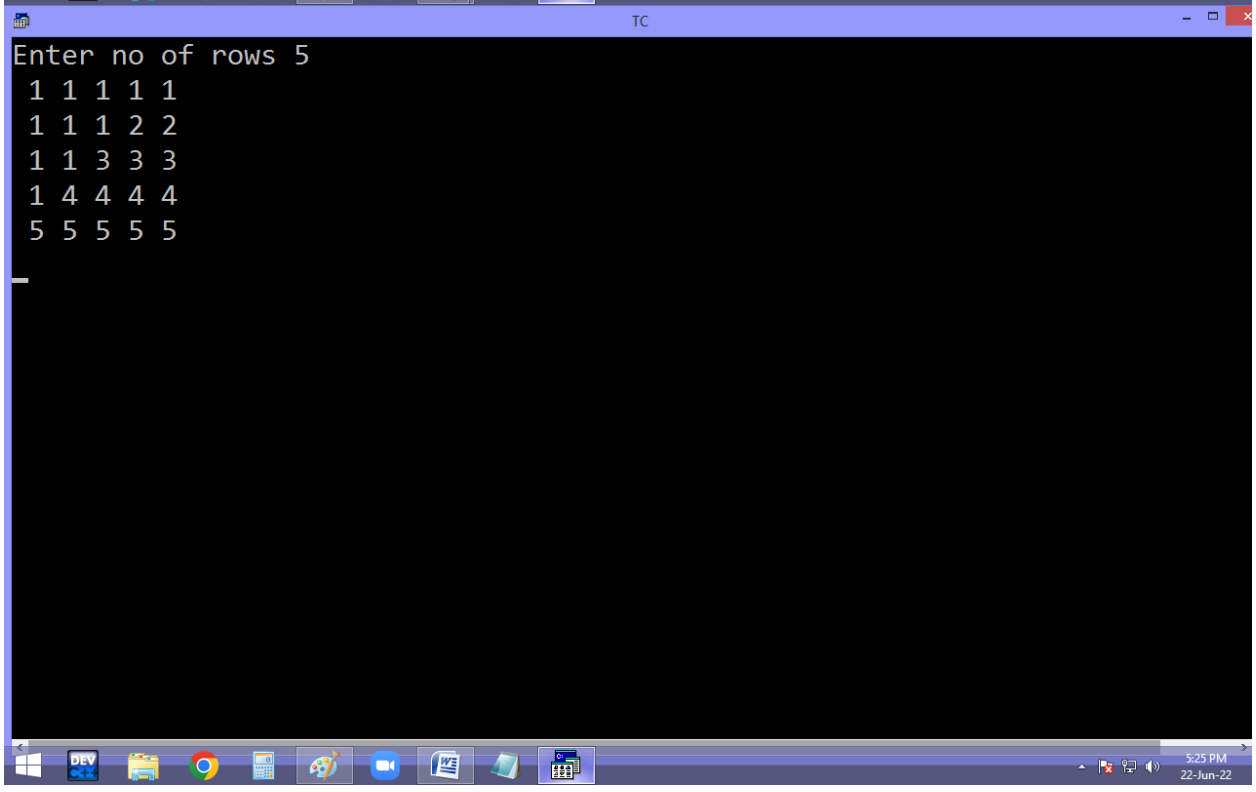

TC
Enter no of rows and columns 4 5
1 2 3 4 5
2 3 4 5 6
3 4 5 6 7
4 5 6 7 8

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



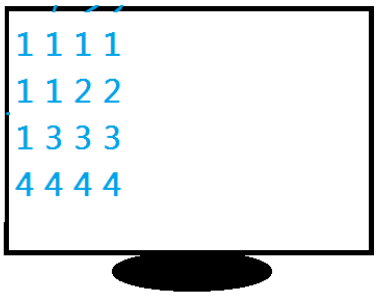

| r | a++ |
|---|---|
| 1 | 1 2 3 4 |
| 2 | 2 3 4 5 |
| 3 | 3 4 5 6 |

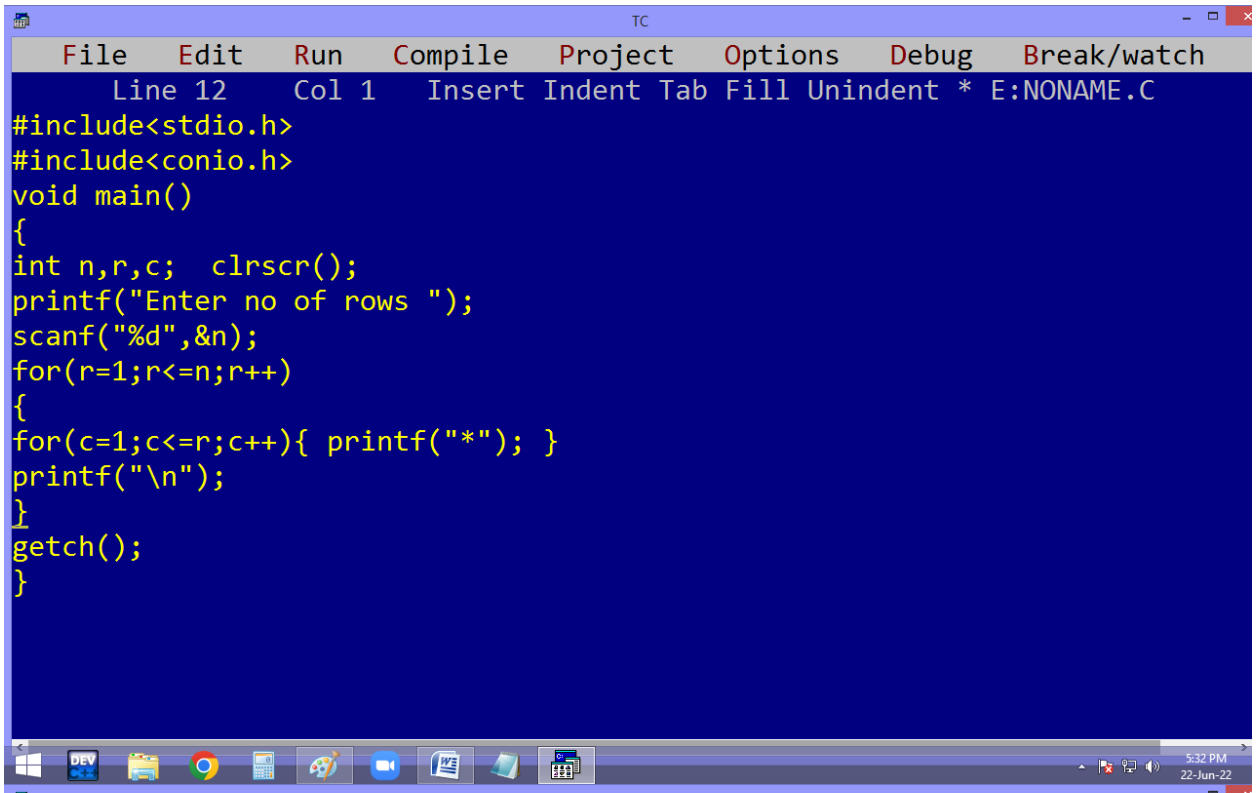

TC
File Edit Run Compile Project Options Debug Break/watch
Line 13 Col 49 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c; clrscr();
printf("Enter no of rows ");
scanf("%d",&n);
for(r=1;r<=n;r++)
{
for(c=1;c<=n;c++)
{
if(c<=n-r)printf("%2d",1); else printf("%2d",r);
}
printf("\n");
}
getch();
}

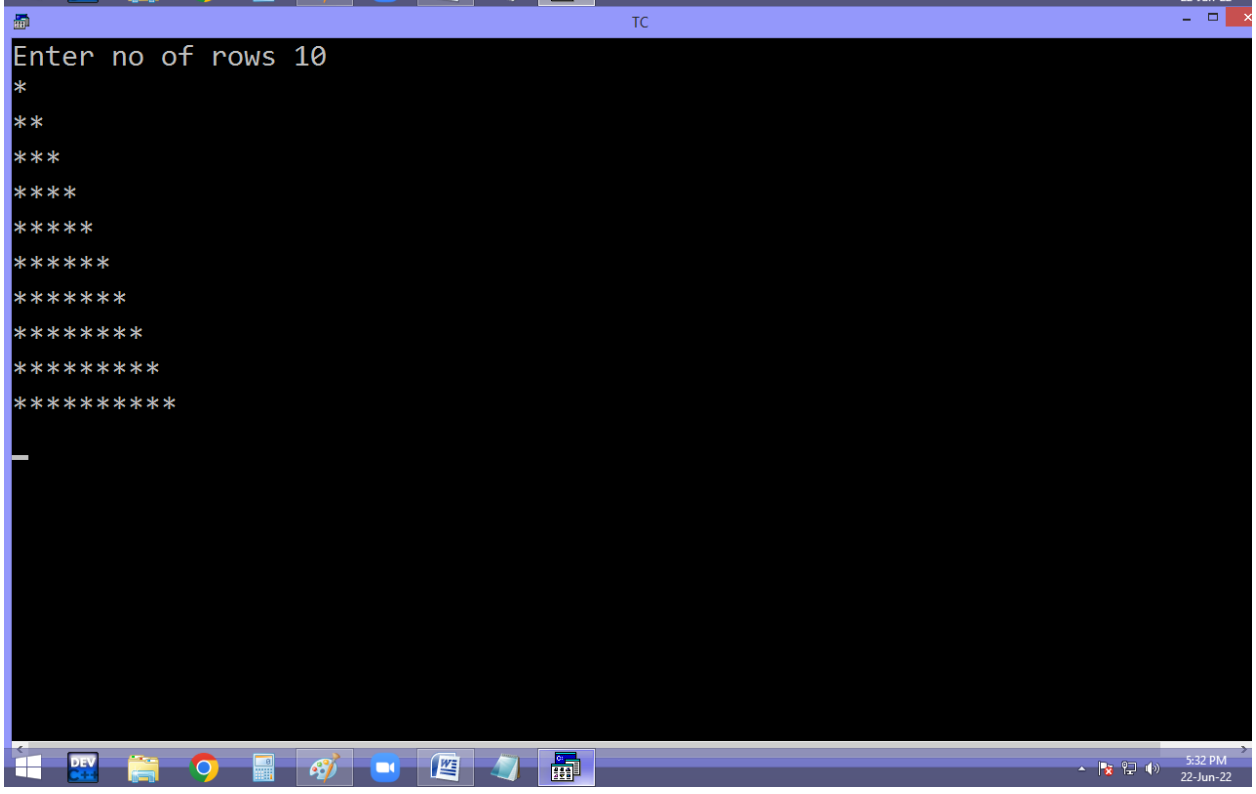

TC
Enter no of rows 5
1 1 1 1 1
1 1 1 2 2
1 1 3 3 3
1 4 4 4 4
5 5 5 5 5

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

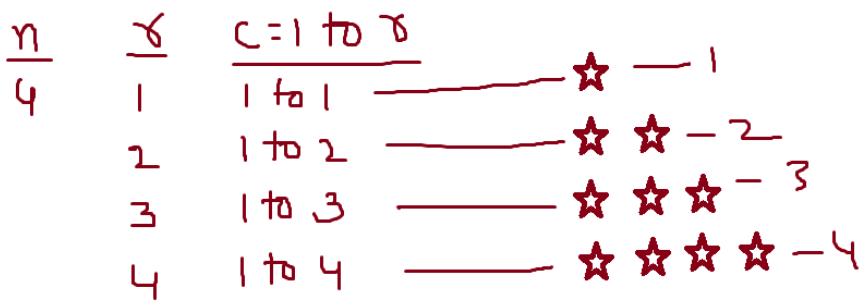
| n | r | times 1 | r times r |
|---|---|---|---|
| 4 - 1 = | 3 | 1 1 1 | 1 |
| 4 - 2 = | 2 | 1 1 | 2 2 |
| 4 - 3 = | 1 | 1 | 3 3 3 |
| 4 - 4 = | 0 | | 4 4 4 4 |

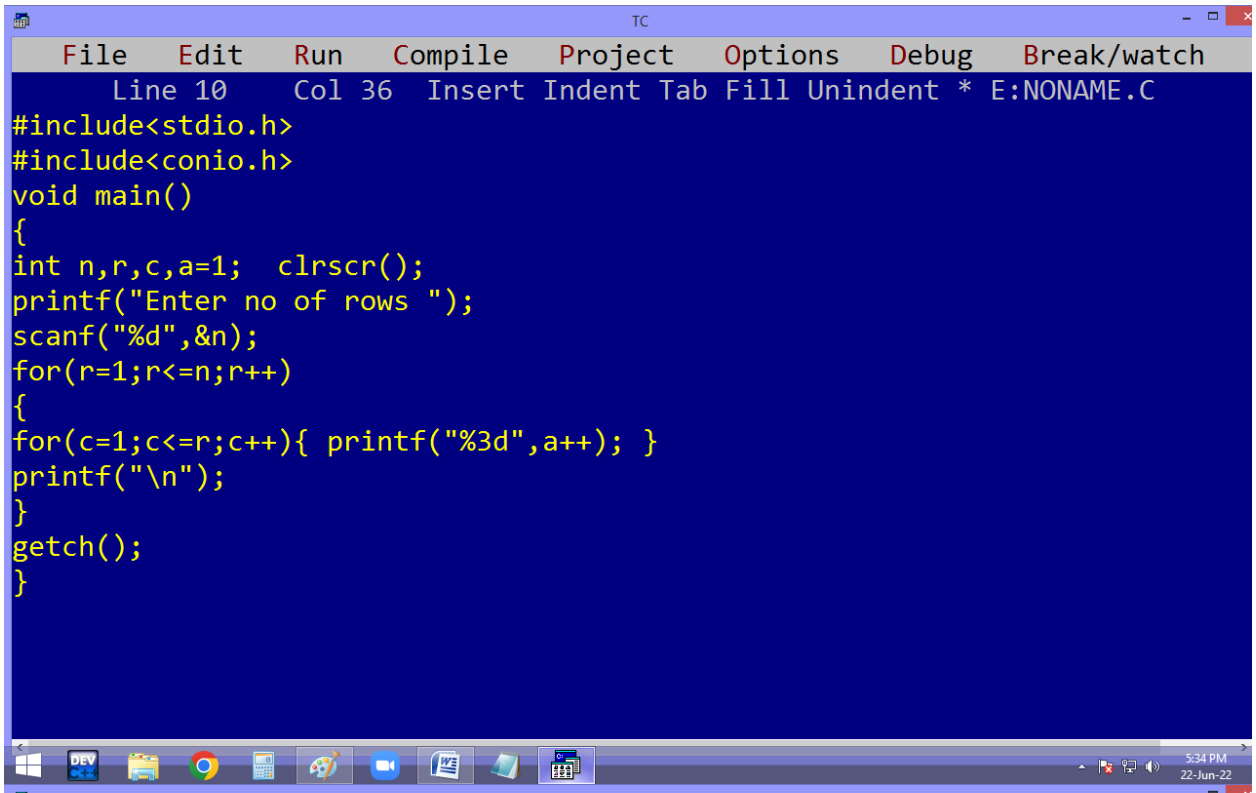


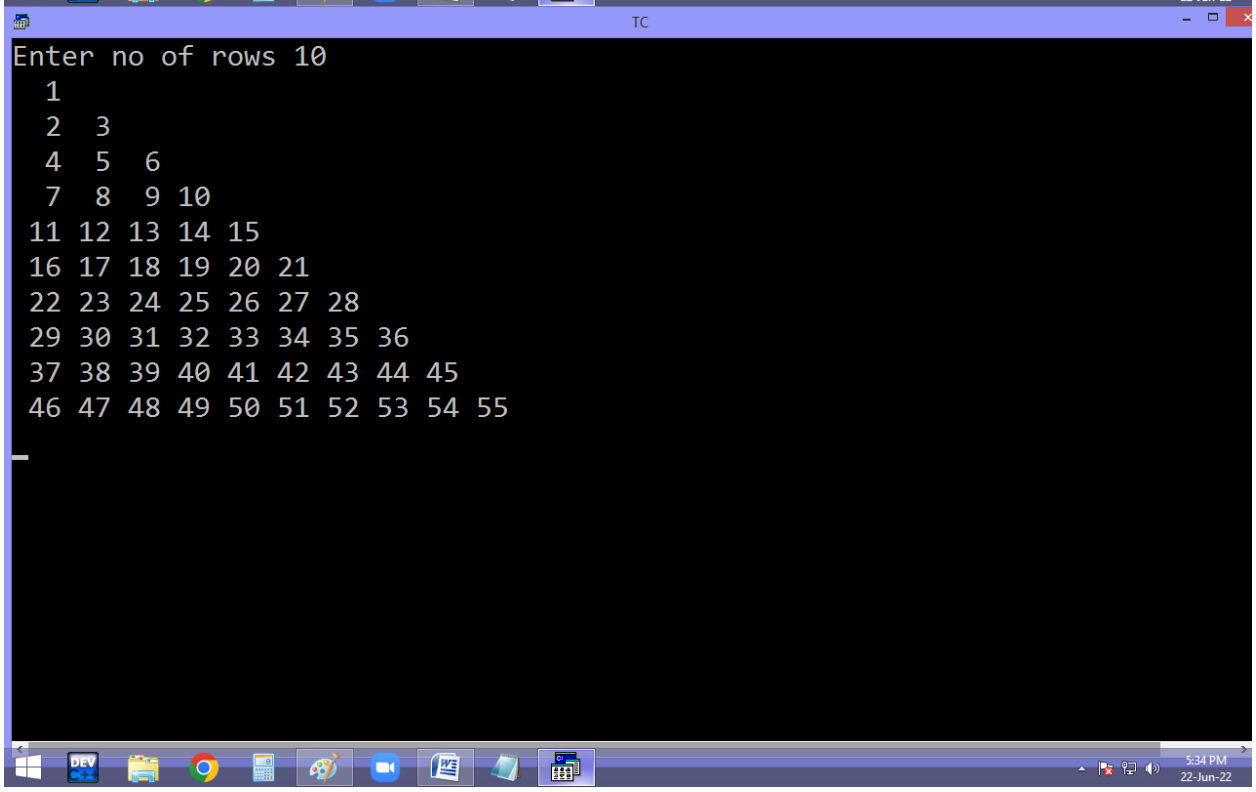

TC
File Edit Run Compile Project Options Debug Break/watch
Line 12 Col 1 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c; clrscr();
printf("Enter no of rows ");
scanf("%d",&n);
for(r=1;r<=n;r++)
{
for(c=1;c<=r;c++){ printf("*"); }
printf("\n");
}
getch();
}

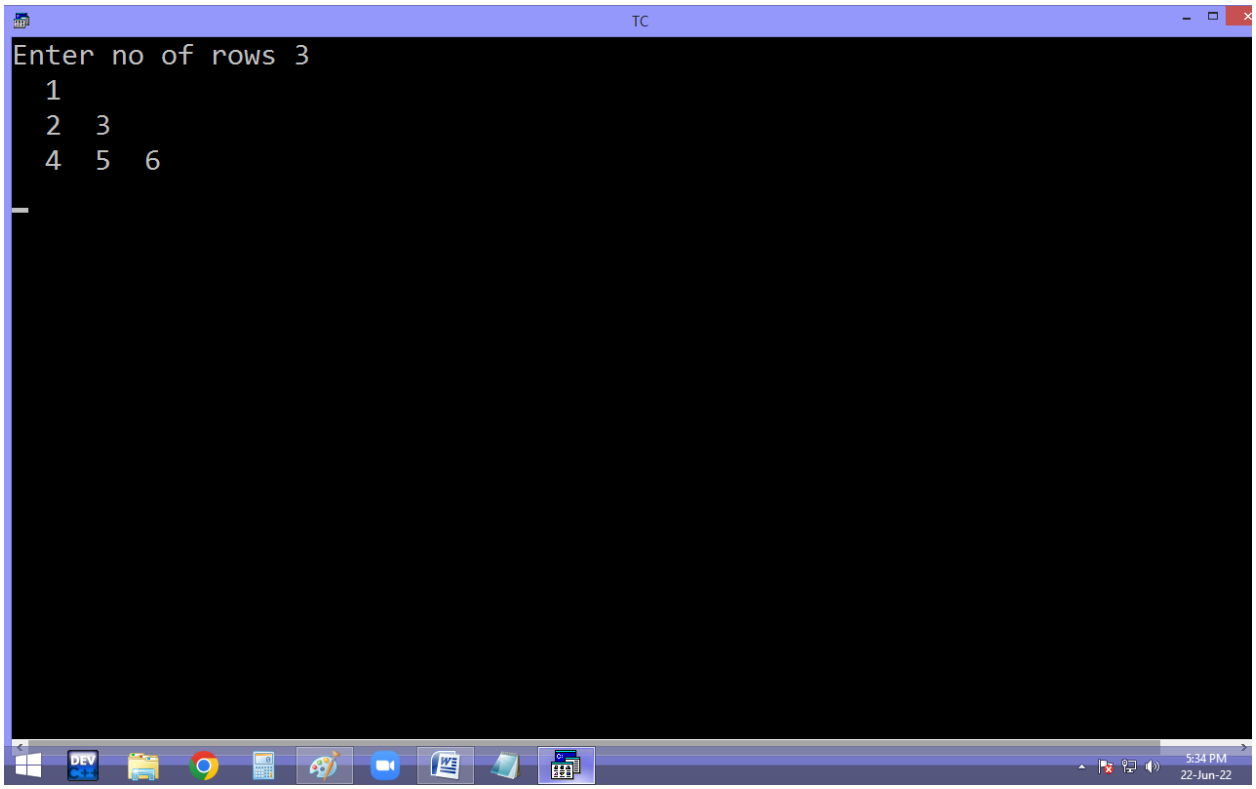

TC
Enter no of rows 10
*
**
***
****
*****
******
*******
********
*********
**********

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




TC
File Edit Run Compile Project Options Debug Break/watch
Line 10 Col 36 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c,a=1; clrscr();
printf("Enter no of rows ");
scanf("%d",&n);
for(r=1;r<=n;r++)
{
for(c=1;c<=r;c++){ printf("%3d",a++); }
printf("\n");
}
getch();
}


TC
Enter no of 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



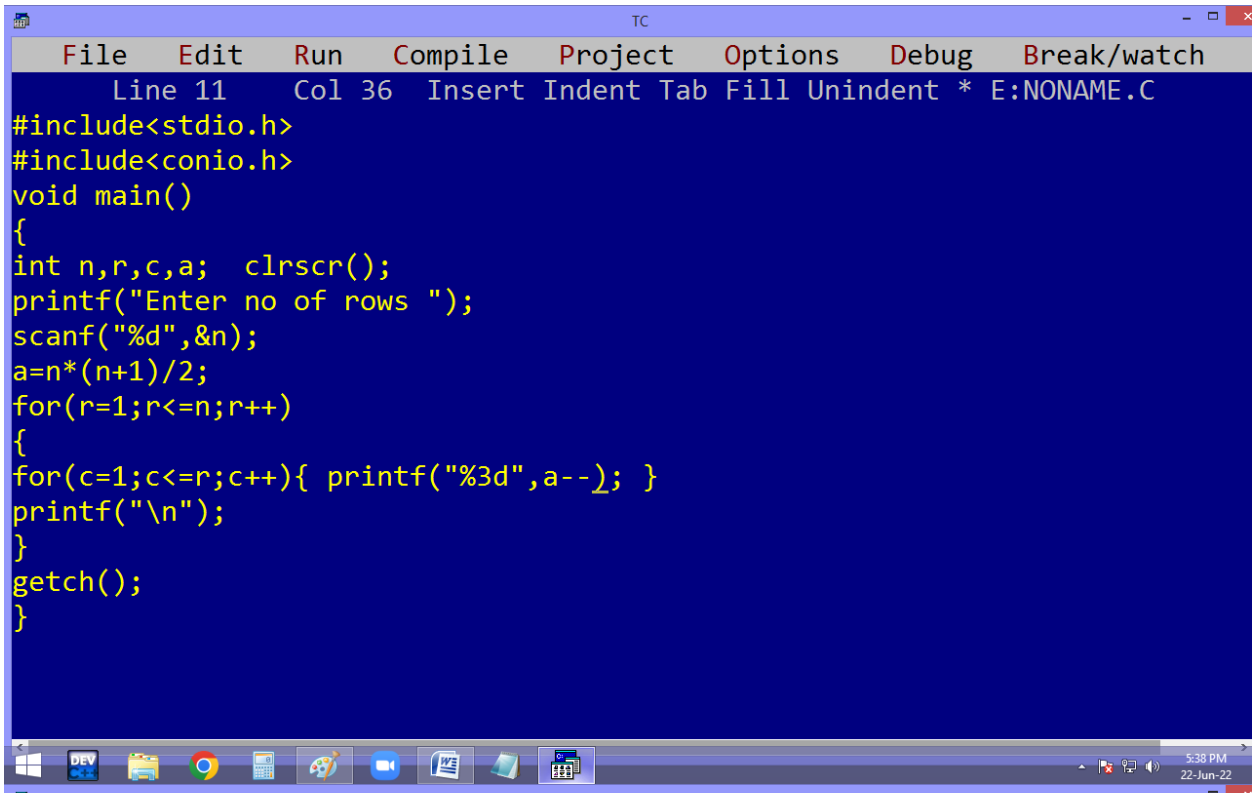

```
for(r=1;r<=4;r++)
{
for(c=1;c<=r;c++)
{
p( a++ );
}
printf("\n");
}
```

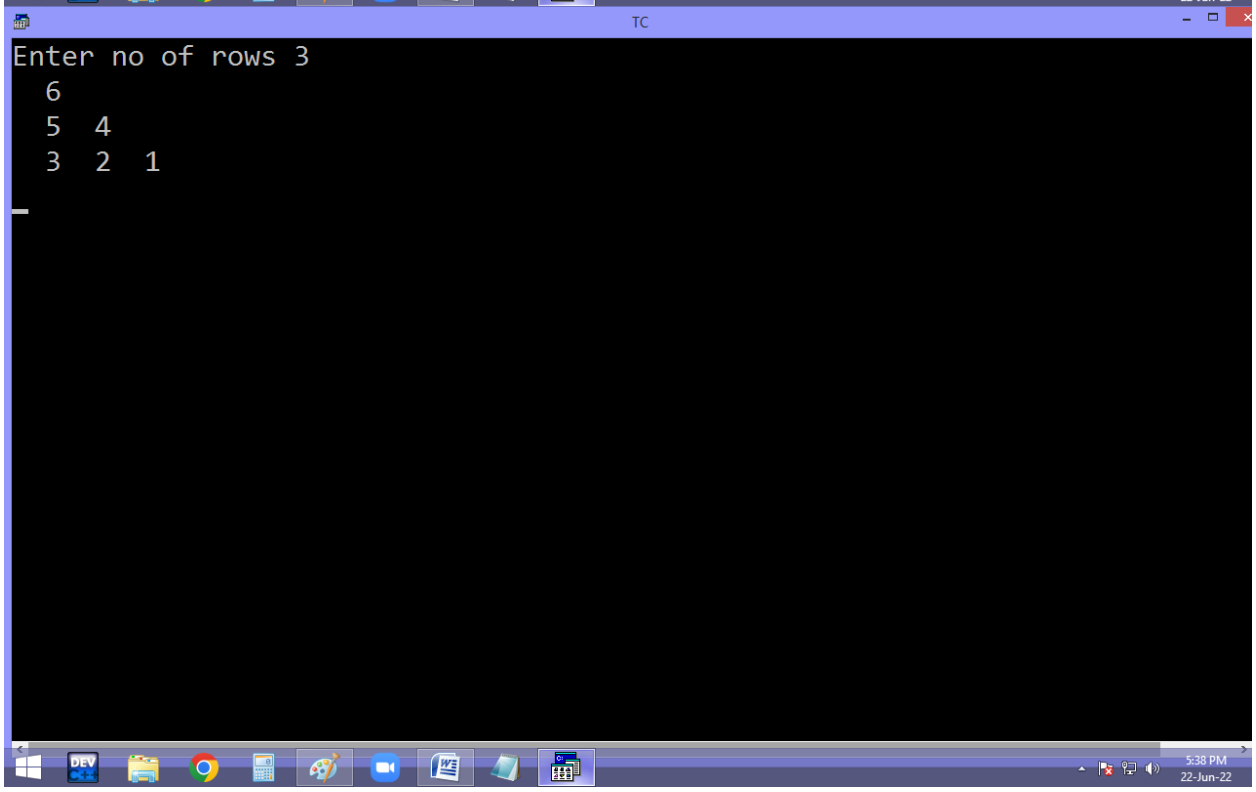
| n | r | c = 1 to r |
|---|---|---|
| 4 | 1 | 1 to 1 |
| | 2 | 1 to 2 |
| | 3 | 1 to 3 |
| | 4 | 1 to 4 |

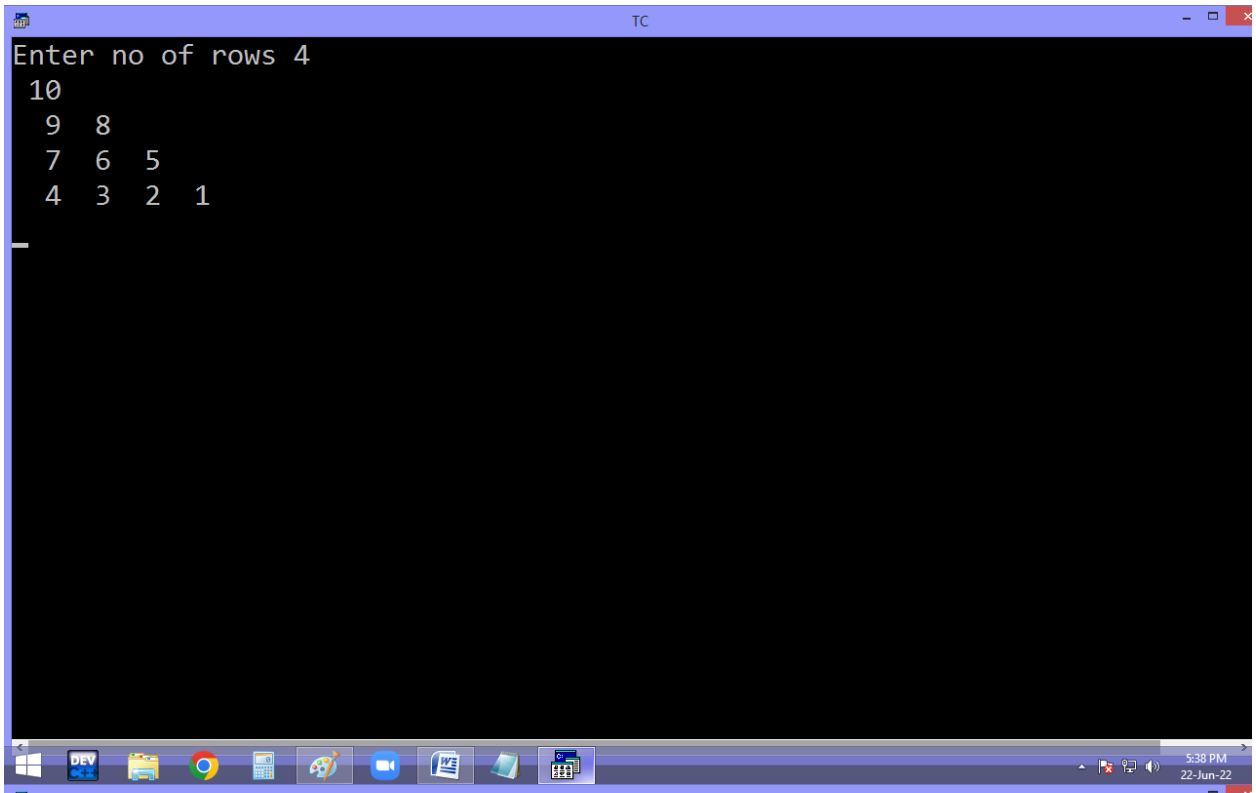
a = 1

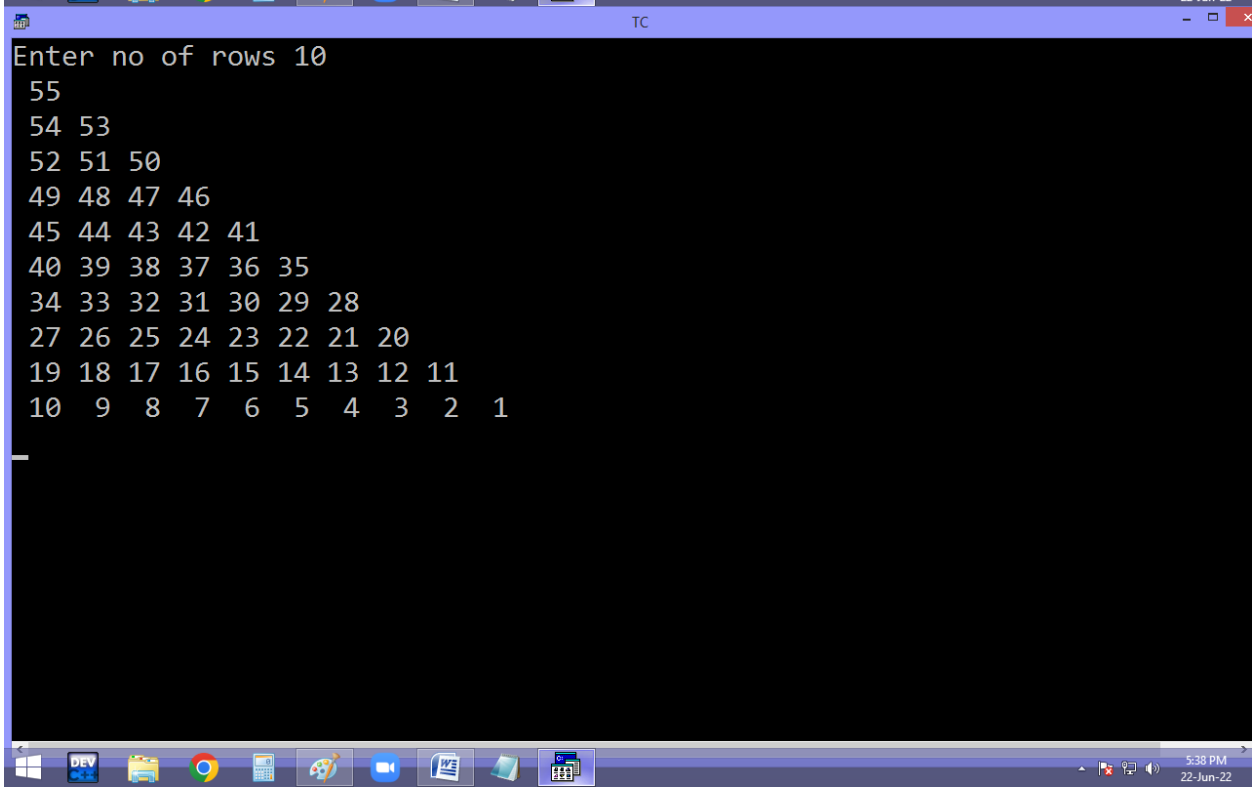
Floyd's triangle

1
2 3
4 5 6
7 8 9 10


TC
File Edit Run Compile Project Options Debug Break/watch
Line 11 Col 36 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c,a; clrscr();
printf("Enter no of 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 no of rows 3
6
5 4
3 2 1


TC
Enter no of rows 4
10
9 8
7 6 5
4 3 2 1
5:38 PM
22-Jun-22


TC
Enter no of 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
5:38 PM
22-Jun-22

```
a=n*n+1/2;
for(r=1;r<=4;r++)
{
for(c=1;c<=r;c++)
{
p( a-- );
}
printf("\n");
}
```

n = 4

| r | c = 1 to r |
|---|---|
| 1 | 1 to 1 |
| 2 | 1 to 2 |
| 3 | 1 to 3 |
| 4 | 1 to 4 |

10 4*5/2=10

9 8

7 6 5

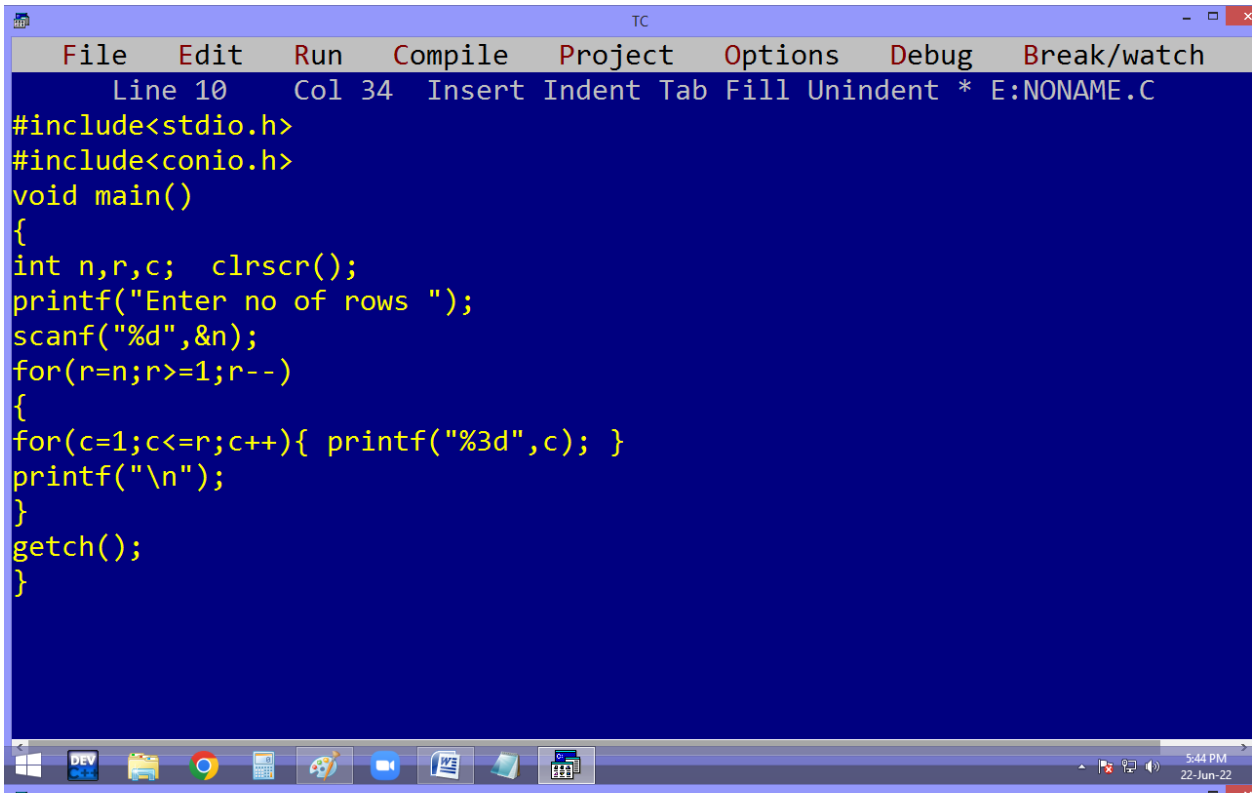
4 3 2 1

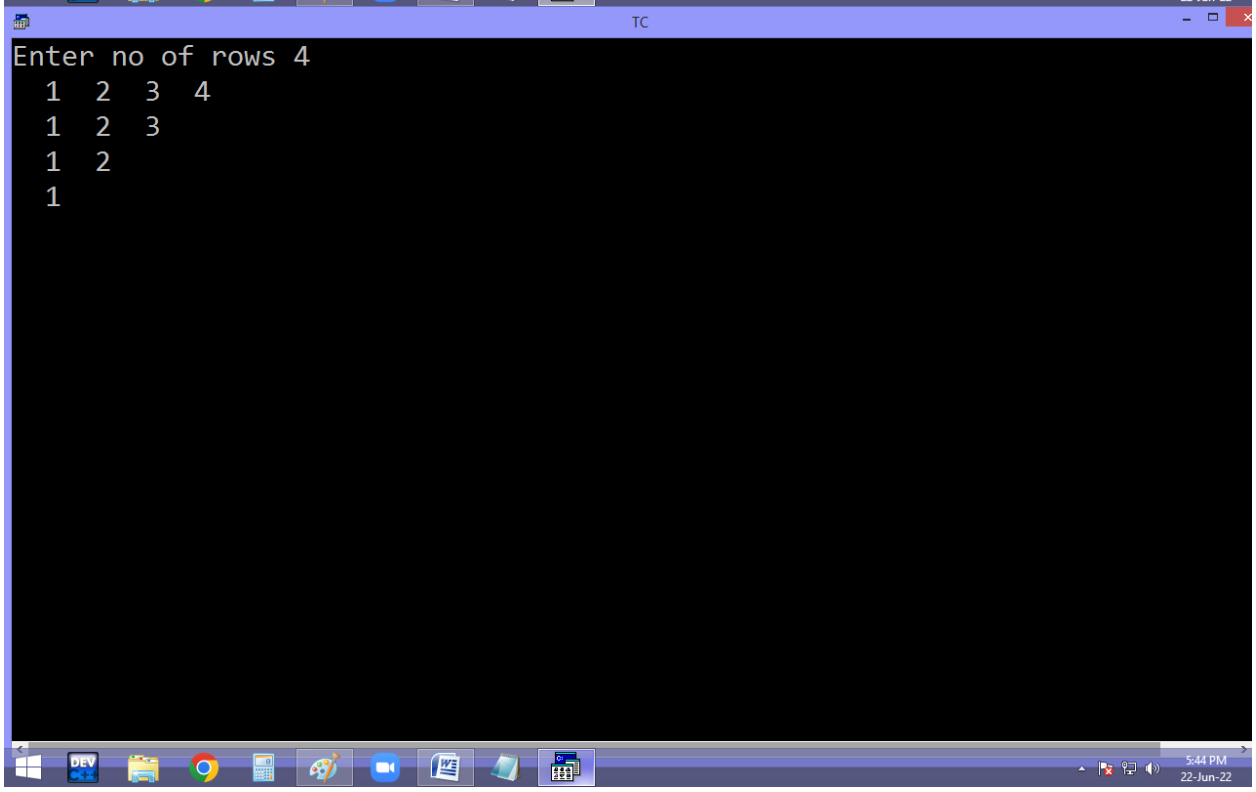
n = 3

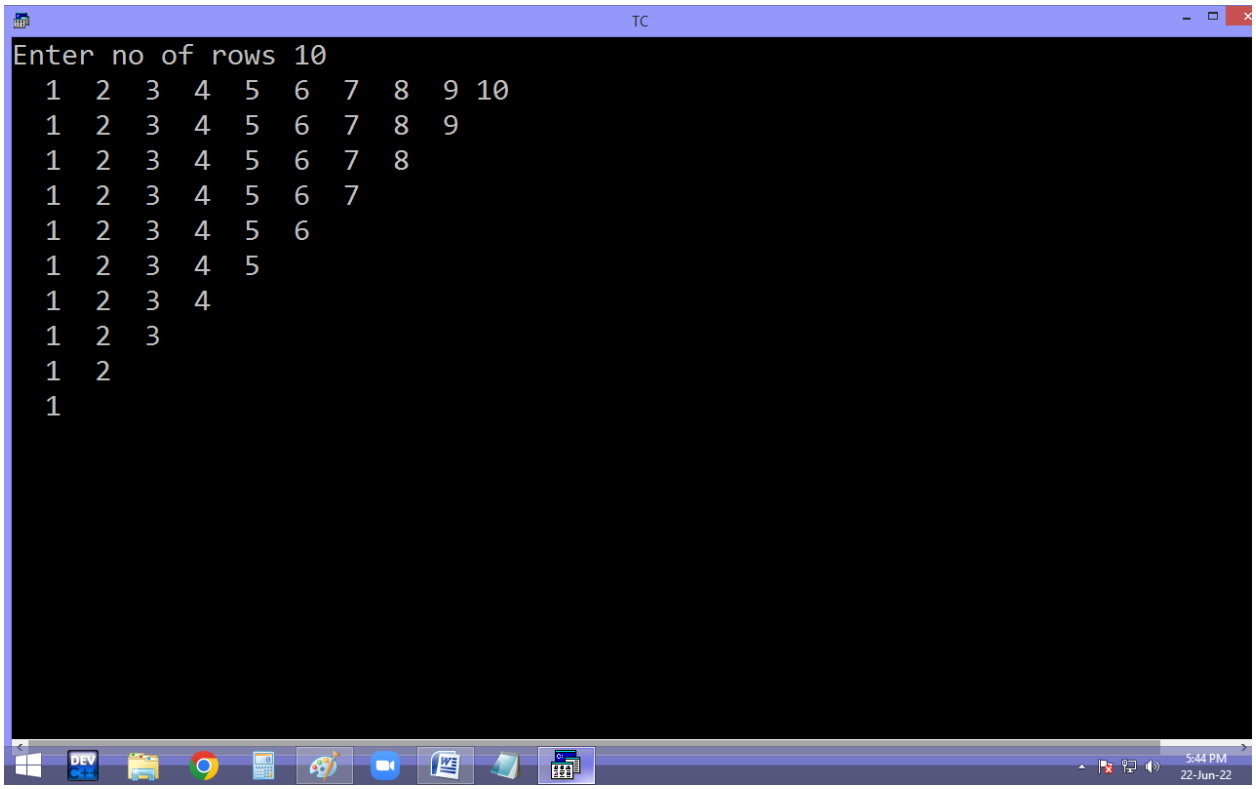
6 3*4/2=6

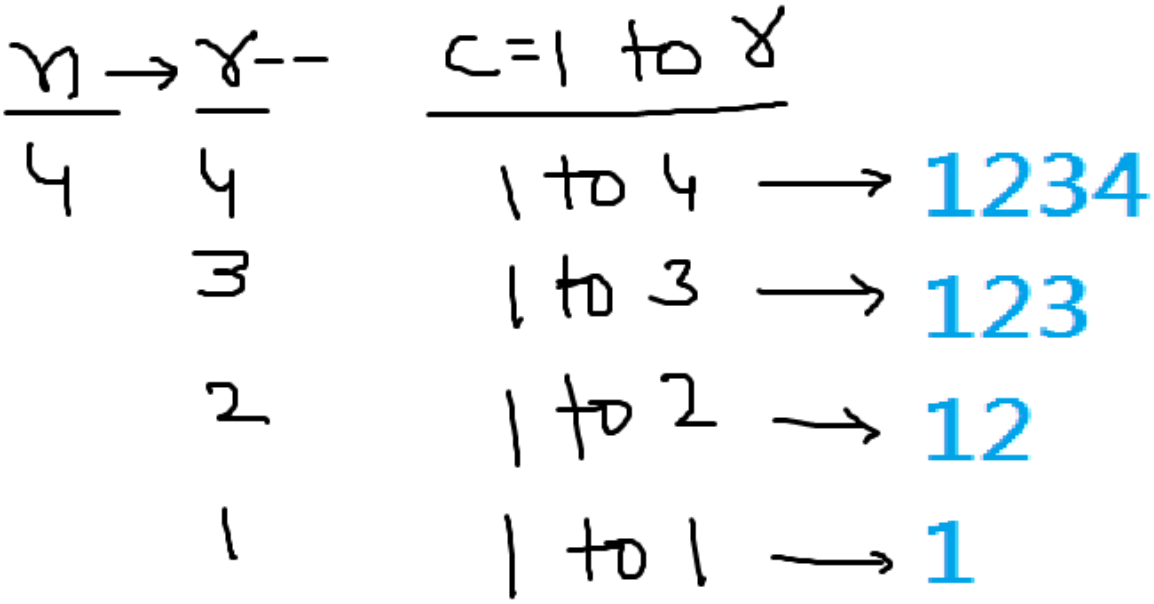
5 4

3 2 1


TC
File Edit Run Compile Project Options Debug Break/watch
Line 10 Col 34 Insert Indent Tab Fill Unindent * E:NONAME.C
#include<stdio.h>
#include<conio.h>
void main()
{
int n,r,c; clrscr();
printf("Enter no of rows ");
scanf("%d",&n);
for(r=n;r>=1;r--)
{
for(c=1;c<=r;c++){ printf("%3d",c); }
printf("\n");
}
getch();
}


TC
Enter no of rows 4
1 2 3 4
1 2 3
1 2
1


TC
Enter no of 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
5:44 PM
22-Jun-22


n → r--
c=1 to r
4 4
1 to 4 → 1234
3
1 to 3 → 123
2
1 to 2 → 12
1
1 to 1 → 1

**Home work:**


1

2 4

3 5 7

6 8 10 12

0

1 1

2 3 5

8 13 21 34