```
      Line 1      Col 2     Insert Indent Tab Fill Unindent * E:9AM.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("%2c",64+c);
}
printf("\n");
}
getch();
}
```

```
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
```

File   Edit   Run   Compile   Project   Options   Debug   Break/watch

Line 12   Col 16   Insert Indent Tab Fill Unindent * E:9AM.C

```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("%2c",96+c);
}
printf("\n");
}
getch();
}
```

```
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
```

```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("%2c",96+r);
}
printf("\n");
}
getch();
}
```

```
Enter no of rows and columns 10 10
 a a a a a a a a a a
 b b b b b b b b b b
 c c c c c c c c c c
 d d d d d d d d d d
 e e e e e e e e e e
 f f f f f f f f f f
 g g g g g g g g g g
 h h h h h h h h h h
 i i i i i i i i i i
 j j j j j j j j j j
```

Line 12   Col 16   Insert Indent Tab Fill Unindent * E:9AM.C

```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("%2c",64+r);
}
printf("\n");
}
getch();
}
```

TC

```
Enter no of rows and columns 10 10
 A A A A A A A A A A
 B B B B B B B B B B
 C C C C C C C C C C
 D D D D D D D D D D
 E E E E E E E E E E
 F F F F F F F F F F
 G G G G G G G G G G
 H H H H H H H H H H
 I I I I I I I I I I
 J J J J J J J J J J
```
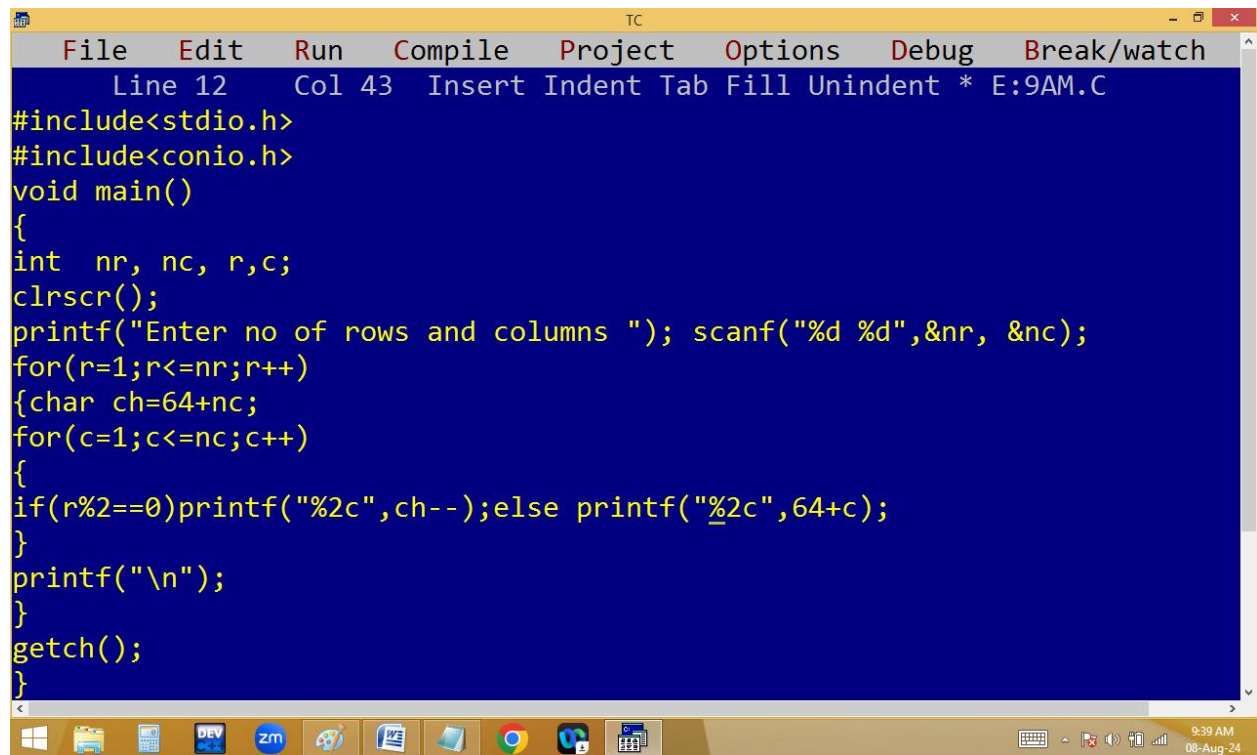
```
   File    Edit    Run    Compile    Project    Options    Debug    Break/watch
      Line 13      Col 52    Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int  nr, nc, r,c;
clrscr();
printf("Enter no of rows and columns "); scanf("%d %d",&nr, &nc);
for(r=1;r<=nr;r++)
{
for(c=1;c<=nc;c++)
{
if(r%2==0)printf("%2c",96+c);else printf("%2c",64+c);
}
printf("\n");
}
getch();
}
```

```
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
```

```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++)
{char ch=64+nc;
for(c=1;c<=nc;c++)
{
if(r%2==0)printf("%2c",ch--);else printf("%2c",64+c);
}
printf("\n");
}
getch();
}
```

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

```
for( r=1; r<=nr; r++ )
{  char  ch=64+nc;
for( c=1;c<=nc;c++)
{
 if(r%2==0)p("%2c", ch-- );else    printf("%2c", 64+c);

}
p("\n");
}
```

ABCD
 DCBA   ௨
ABCD
 DCBA   ௪

nc=4+64=68=D 67=C 66=B
65=A

```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();
}
```

```
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
```

```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();
}
```

```
Enter no of rows and columns 10 10
 A A A A A A A A A A
 b b b b b b b b b b
 C C C C C C C C C C
 d d d d d d d d d d
 E E E E E E E E E E
 f f f f f f f f f f
 G G G G G G G G G G
 h h h h h h h h h h
 I I I I I I I I I I
 j j j j j j j j j j
```

```
File    Edit    Run    Compile    Project    Options    Debug    Break/watch
       Line 14    Col 39   Insert Indent Tab Fill Unindent * E:9AM.C
#include<stdio.h>
#include<conio.h>
void main()
{
int  nr, nc, r,c; char L='a', U='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();
}
```

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

AAAA   1
2 aaaa
BBBB   3
bbbb

r
1   A A A
3   B B B
5   C C C

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

10:13 AM
08-Aug-24

Enter no of rows and columns 10 52
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz
AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTtUuVvWwXxYyZz

```
  File    Edit    Run    Compile    Project    Options    Debug    Break/watch
      Line 12     Col 75   Insert Indent Tab Fill Unindent * E:9AM.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==r)printf("%3d",1);else if(r>c)printf("%3d",0); else printf("%3d",2);
}
printf("\n");
}
getch();
}
```

```
Enter no of rows 3
  1  2  2
  0  1  2
  0  0  1
```

```
Enter no of rows 10
 1  2  2  2  2  2  2  2  2  2
 0  1  2  2  2  2  2  2  2  2
 0  0  1  2  2  2  2  2  2  2
 0  0  0  1  2  2  2  2  2  2
 0  0  0  0  1  2  2  2  2  2
 0  0  0  0  0  1  2  2  2  2
 0  0  0  0  0  0  1  2  2  2
 0  0  0  0  0  0  0  1  2  2
 0  0  0  0  0  0  0  0  1  2
 0  0  0  0  0  0  0  0  0  1
```

```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==r){textcolor(LIGHTRED);cprintf("%3d",1);}
else if(r>c){textcolor(YELLOW); cprintf("%3d",0);}
else {textcolor(LIGHTGREEN);cprintf("%3d",2);}
}
printf("\n");
}
getch();
}
```

```
Enter no of rows 10
  1  2  2  2  2  2  2  2  2  2
  0  1  2  2  2  2  2  2  2  2
  0  0  1  2  2  2  2  2  2  2
  0  0  0  1  2  2  2  2  2  2
  0  0  0  0  1  2  2  2  2  2
  0  0  0  0  0  1  2  2  2  2
  0  0  0  0  0  0  1  2  2  2
  0  0  0  0  0  0  0  1  2  2
  0  0  0  0  0  0  0  0  1  2
  0  0  0  0  0  0  0  0  0  1
```

```
for( r=1; r<=nr; r++ )
{
for( c=1;c<=nc;c++)
{
if(r==c)p(1);
else if(r>c) p(0);
else p(2);
}
p("\n");
}
```
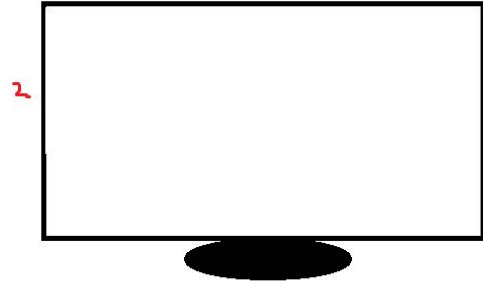
1 (1,1)	**2** 1,2	**2** 1,3
0 2,1	**1** (2,2)	**2** 2,3
0 3,1	**0** 3,2	**1** (3,3)

```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("%3d",1);else printf("%3d",r);
}
printf("\n");
}
getch();
}
```

```
Enter no of 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
```

```
for( r=1; r<=n ; r++ )
{
for( c=1;c<=n ;c++)
{
if(c<=n-r)p(1);else p(r);
    4-1= 3         1
    4-2  2         2
    4-3  1         3
    4-4  0         4
}
p("\n");
}
```

1111 —1
1122 —2
1333 —3
4444 —4

1111
1122
1333
4444

$\dfrac{n}{4} - \dfrac{r}{1} = \dfrac{1}{3}$ $\dfrac{8}{1}$

4 — 2 = 2   2
4 — 3 = 1   3
4 — 4 = 0   4

```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<=n;c++)
{
if(c==1||r==1||c==n||r==n)printf("%3d",a++);else printf("%3c",'*');
}
printf("\n");
}
getch();
}
```

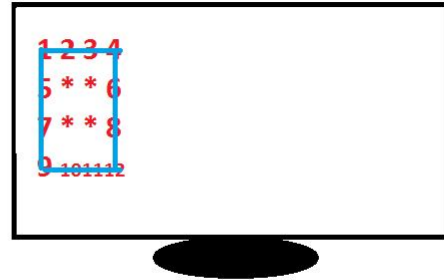```
Enter no of rows 10
  1 2 3 4 5 6 7 8 9 10
 11 * * * * * * * * 12
 13 * * * * * * * * 14
 15 * * * * * * * * 16
 17 * * * * * * * * 18
 19 * * * * * * * * 20
 21 * * * * * * * * 22
 23 * * * * * * * * 24
 25 * * * * * * * * 26
 27 28 29 30 31 32 33 34 35 36
```

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

```
1 2 3 4
5 * * 6
7 * * 8
9 10 11 12
```

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

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

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