

```
/*  
1  
3*2  
4*5*6  
10*9*8*7  
11*12*13*14*15  
*/
```

```
#include<stdio.h>
```

```
void main(){  
    int n=7;  
  
    int cnt=0;  
    int row,col;  
  
    int temp;  
    for(row=1;row<=n;row++){  
        if(row%2==1) temp=cnt+1;  
        else temp=cnt+row;  
        cnt+=row;  
        if(row%2==1){  
            for(col=1;col<=row;col++)  
                row!=col?printf("%d*",temp++):printf("%d",temp++);  
        }  
        else{  
            for(col=1;col<=row;col++)  
                row!=col?printf("%d*",temp--):printf("%d",temp--);  
        }  
        printf("\n");  
    }  
}
```

```
/*  
n=4 s=3  
3  
44  
555  
6666  
6666  
555  
44  
3  
*/
```

```
#include<stdio.h>
```

```
void main(){  
    int n=4,s=3;  
  
    // upper right angle triangle  
    int row,col;  
    for(row=1;row<=n;row++){  
        for(col=1;col<=row;col++){  
            printf("%d",s);  
        }  
        s++;  
        printf("\n");  
    }  
    s-=1;  
    for(row=1;row<=n;row++){  
        for(col=1;col<=n-row+1;col++){  
            printf("%d",s);  
        }  
        s--;  
        printf("\n");  
    }  
}
```

```
/*  
1  
22  
333  
4444  
55555  
4444  
333  
22  
1  
*/
```

```
#include<stdio.h>
```

```
void main(){  
    int n=5;  
  
    int row,col;  
    for(row=1;row<=n;row++){  
        for(col=1;col<=row;col++){  
            printf("%d",row);  
        }  
        printf("\n");  
    }  
    for(row=1;row<n;row++){  
        for(col=1;col<=n-row;col++){  
            printf("%d",n-row);  
        }  
        printf("\n");  
    }  
}
```

```
/*  
1  
2*2  
3*3*3  
4*4*4*4  
4*4*4*4  
3*3*3  
2*2  
1  
*/
```

```
#include<stdio.h>
```

```
void main(){  
    int n=4;  
  
    int row,col;  
    // upper part  
    for(row=1;row<=n;row++){  
        for(col=1;col<=row;col++){  
            row!=col?printf("%d*",row):printf("%d",row);  
        }  
        printf("\n");  
    }  
    // lower part  
    for(row=1;row<=n;row++){  
        for(col=1;col<=n-row+1;col++){  
            (n-row+1)!=col?printf("%d*",n-row+1):printf("%d",n-row+1);  
        }  
        printf("\n");  
    }  
}
```

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

```
#include<stdio.h>
```

```
void main(){
    int n=4;

    int row,col;
    // upper part
    int cnt=1;
    for(row=1;row<=n;row++){
        for(col=1;col<=row;col++){
            row!=col?printf("%d*",cnt++):printf("%d",cnt++);
            printf("\n");
        }
    }
    int temp;
    for(row=1;row<=n;row++){
        cnt--=(n-row+1);
        temp=cnt;
        for(col=1;col<=n-row+1;col++){
            col!=(n-row+1)?printf("%d*",temp++):printf("%d",temp);
            printf("\n");
        }
    }
}
```

```
/*  
1  
11  
101  
1001  
11111  
*/
```

```
#include<stdio.h>
```

```
void main(){  
    int n=5;  
  
    int row,col;  
    for(row=1;row<=n;row++){  
        for(col=1;col<=row;col++){  
            if(row==1 || row==n || col==1 || col==row)  
                printf("1");  
            else  
                printf("0");  
        }  
        printf("\n");  
    }  
}
```



```
/*  
1  
123  
12345  
1234567  
123456789  
1234567  
12345  
123  
1  
*/
```

```
#include<stdio.h>
```

```
void main(){
```

```
    int n=5;
```

```
    int row,col;
```

```
    // UPPER PORTION
```

```
    for(row=1;row<=n;row++){
```

```
        for(col=1;col<=2*row-1;col++){
```

```
            printf("%d",col);
```

```
        }
```

```
        printf("\n");
```

```
    }
```

```
    // LOWER PORTION
```

```
    for(row=1;row<n;row++){
```

```
        for(col=1;col<=2*(n-row)-1;col++){
```

```
            printf("%d",col);
```

```
        }
```

```
        printf("\n");
```

```
    }
```

```
}
```

```
/*  
1  
2 4  
3 6 9  
4 8 12 16  
5 10 15 20 25  
*/
```

```
#include<stdio.h>  
void main(){  
    int n=5;  
    int row,col;  
    for(row=1;row<=n;row++){  
        for(col=1;col<=row;col++){  
            printf("%d ",row*col);  
        }  
        printf("\n");  
    }  
}
```



```

/*
1*2*3*4*17*18*19*20
  5*6*7*14*15*16
    8*9*12*13
      10*11
*/

```

```

#include<stdio.h>

```

```

void main(){

```

```

    int n=4;

```

```

    int row,col,spaces;

```

```

    int x=1,y=n*n+1;

```

```

    for(row=1;row<=n;row++){

```

```

        spaces=2*(row-1);

```

```

        for(col=1;col<=spaces;col++)

```

```

            printf(" ");

```

```

        for(col=1;col<=n-row+1;col++)

```

```

            printf("%d*",x++);

```

```

        for(col=1;col<=n-row+1;col++)

```

```

            col!=(n-row+1)?printf("%d*",y++):printf("%d",y);

```

```

        y=y-2*(n-row);

```

```

        printf("\n");

```

```

    }

```

```

}

```

```
/*
```

```
n=3
```

```
333
```

```
313
```

```
323
```

```
333
```

```
*/
```

```
#include<stdio.h>
```

```
void main(){
```

```
    int n=3;
```

```
    int row,col;
```

```
    int temp=1;
```

```
    for(row=1;row<=n+1;row++){
```

```
        for(col=1;col<=n;col++){
```

```
            if(row==1 || row==n+1 || col==1 || col==n)
```

```
                printf("%d",n);
```

```
            else
```

```
                printf("%d",temp++);
```

```
        }
```

```
        printf("\n");
```

```
    }
```

```
}
```