"""

1 2 3

4 5 6

7 8 9

"""

num=1

for i in range (1,4):

for j in range (1,4):

print(num, end=" ")

num+=1

print()

"""

A A A

B B B

C C C

"""

for i in range(65, 68):

for j in range(1,4):

print(chr(i), end=" ")

print()

"""

A B C

A B C

A B C

"""

for i in range(1,4):

for j in range(65,68):

print(chr(j), end=" ")

print()

"""

A B C

D E F

G H I

"""

num=65

for i in range(1,4):

for j in range(1,4):

print(chr(num), end=" ")

num+=1

print()

"""

\*

\* \*

\* \* \*

"""

for i in range(1,4):

for j in range(1,i+1):

print("\*", end=" ")

print()

"""

\* \* \*

\* \*

\*

"""

for i in range(4,0,-1):

for j in range(1,i):

print("\*", end=" ")

print()

"""

\* \* \*

\* \*

\*

"""

for i in range(1,4):

for k in range(1,i):

print(" ", end=" ")

for j in range(4,i,-1):

print("\*", end=" ")

print()

"""

1

1 2

1 2 3

"""

for i in range(1,4):

for j in range(1,i+1):

print(j, end=" ")

print()

"""

1

2 2

3 3 3

"""

for i in range(1,4):

for j in range(1,i+1):

print(i, end=" ")

print()

"""

1

2 3

4 5 6

"""

num = 1

for i in range(1,4):

for j in range(1,i+1):

print(num, end=" ")

num+=1

print()

"""

\*\*\*\*\*

"""

num = 1

for i in range(1,6):

print("\*", end=" ")

"""

\*

\*

\*

\*

\*

"""

num = 1

for i in range(1,6):

print("\*")

"""

\*

\*

\*

\*

\*

"""

for i in range(1,6):

for j in range(2,i+1):

print(" ", end=" ")

print("\*")

"""

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

\* \* \* \* \*

"""

for i in range(1,6):

for j in range(1,6):

print("\*", end=" ")

print()

"""

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

"""

for i in range(1,6):

for j in range(1,6):

print(j, end=" ")

print()

"""

1 1 1 1 1

2 2 2 2 2

3 3 3 3 3

4 4 4 4 4

5 5 5 5 5

"""

for i in range(1,6):

for j in range(1,6):

print(i, end=" ")

print()

"""

1

0 0

1 1 1

0 0 0 0

1 1 1 1 1

"""

a=1

b=0

for i in range(1,6):

for j in range(1,i+1):

if(i%2 == 0):

print(b, end=" ")

else:

print(a, end=" ")

print()

"""

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

"""

for i in range(1,6):

for j in range(1,i+1):

print("\*", end=" ")

print()

"""

a

a b

a b c

a b c d

a b c d e

"""

for i in range(1,6):

for j in range(97, 97+i):

print(chr(j), end=" ")

print()

"""

1

23

456

78910

"""

cnt=1

for i in range(1,5):

for j in range(i):

print(cnt, end=" ")

cnt+=1

print()

"""

a

bc

def

ghij

klmno

"""

cnt=97

for i in range(1,6):

for j in range(i):

print(chr(cnt), end=" ")

cnt+=1

print()

"""

\*

##

\*\*\*

####

\*\*\*\*\*

"""

for i in range(1,6):

for j in range(i):

if(i%2==0):

print("#" ,end=" ")

else:

print("\*", end=" ")

print()

"""

1

10

101

1010

10101

"""

for i in range(1,6):

for j in range(1, i+1):

if(j%2==0):

print("0", end=" ")

else:

print("1", end=" ")

print()

"""

\*

\* \*

\* \*

\* \*

\* \* \* \* \*

"""

for i in range(5):

for j in range(5):

if j==0 or i ==4 or i==j:

print("\*", end=" ")

else:

print(end=" ")

print()

"""

1

12

1 3

1 4

12345

"""

for i in range(5):

for j in range(5):

if i==4 or j==0 or i==j:

print(j+1, end=" ")

else:

print(" ", end=" ")

print()

"""

1

22

3 3

4 4

55555

"""

for i in range(5):

for j in range(5):

if i==4 or j==0 or i==j:

print(i+1, end=" ")

else:

print(" ", end=" ")

print()

"""

A

AB

A C

A D

ABCDE

"""

a = 65

for i in range(5):

for j in range(5):

if i==4 or j==0 or i==j:

print(chr(a+j), end=" ")

else:

print(" ", end=" ")

print()

"""

a

bc

d e

f g

hijkl

"""

a = 97

for i in range(5):

for j in range(5):

if i==4 or j==0 or i==j:

print(chr(a), end=" ")

a+=1

else:

print(" ", end=" ")

print()

"""

\*

\*\*

\*@\*

\*@@\*

\* \* \* \* \*

"""

for i in range(5):

for j in range(i+1):

if i==4 or j==0 or i==j:

print("\*", end=" ")

else:

print("@", end=" ")

print()

"""

5

54

543

5432

54321

"""

for i in range(5):

for j in range(i+1):

a=5

print(a-j, end=" ")

print()

"""

\*

\*#

\*#\*

\*#\*#

\*#\*#\*

"""

for i in range(5):

for j in range(i+1):

if j%2==0:

print("\*", end=" ")

else:

print("#", end=" ")

print()

"""

1

10

1 1

1 0

10101

"""

for i in range(5):

for j in range(i+1):

if i==4 or j==0 or i==j:

if j%2==0:

print("1", end=" ")

else:

print("0", end=" ")

else:

print(" ", end=" ")

print()

"""

1

123

12345

1234567

123456789

"""

for i in range(9):

if i%2==0:

for j in range(i+1):

a=1

print(a+j, end=" ")

print()

"""

1

222

33333

4444444

555555555

"""

for i in range(9):

if i%2==0:

a= i//2+1

for j in range(i+1):

print(a, end=" ")

print()

"""

\*\*\*\*\*

\*\*\*\*

\*\*\*

\*\*

\*

"""

for i in range(6,1, -1):

for j in range(i-1):

print("\*", end=" ")

print()

"""

12345

1234

123

12

1

"""

for i in range(6,1, -1):

for j in range(i-1):

print(j+1, end=" ")

print()

"""

55555

4444

333

22

1

"""

for i in range(6,1, -1):

for j in range(i-1):

print(i-1, end=" ")

print()

"""

ABCDE

ABCD

ABC

AB

A

"""

for i in range(6,1, -1):

for j in range(i-1):

a=65

print(chr(a+j), end=" ")

print()

"""

EEEEE

DDDD

CCC

BB

A

"""

for i in range(6,1, -1):

for j in range(i-1):

a=63

print(chr(a+i), end=" ")

print()

"""

ABCDE

A D

A C

AB

A

"""

for i in range(5,0,-1):

for j in range(i):

a=65

if i==5 or j==0 or i==j+1:

print(chr(a+j), end=" ")

else:

print(" ", end=" ")

print()

"""

\*\*\*\*\*

####

\*\*\*

##

\*

"""

for i in range(5,0,-1):

for j in range(i):

if(i%2==0):

print("#", end=" ")

else:

print("\*", end=" ")

print()

"""

55555

4  4

3 3

22

1

"""

for i in range(5,0,-1):

    for j in range(i):

        if i==5 or j==0 or i==j+1:

            print(i, end=" ")

        else:

            print(" ", end=" ")

    print()

"""

123456

54321

1234

321

12

1

"""

for i in range(6,0,-1):

    for j in range(i):

        if i%2==0:

            print(j+1, end=" ")

        else:

            print(i-j, end=" ")

    print()

"""

\*

\*\*

\*\*\*\*

\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*

"""

count = 1

for i in range(5):

    for j in range(count):

        print("\*", end="")

    print()

    count += i + 1

"""

A

BCD

EFGHI

JKLMNOP

"""

a=65

for i in range(4):

    for j in range((2\*i)+1):

        print(chr(a), end=" ")

        a+=1

    print()

"""

54321

5432

543

54

5

"""

for i in range(5,0,-1):

    for j in range(i):

        print(i-j, end=" ")

    print()

"""

    1

   12

  123

 1234

12345

"""

for i in range(1,6):

    for k in range(1,6-i):

        print(" ", end=" ")

    for j in range(i):

        print(j+1, end=" ")

    print()

"""

\*

\*\*

\*\*\*

"""

for i in range(1,4):

for k in range(3,i,-1):

print(" ", end=" ")

for j in range(i):

print("\*", end=" ")

print()

"""

    1

   22

  333

 4444

55555

"""

for i in range(1,6):

    for k in range(1,6-i):

        print(" ", end=" ")

    for j in range(i):

        print(i, end=" ")

    print()

"""

    A

   AB

  ABC

 ABCD

ABCDE

"""

a=65

for i in range(1,6):

    for k in range(1,6-i):

        print(" ", end=" ")

    for j in range(i):

        print(chr(a+j), end=" ")

    print()

"""

\*    \*

\*\*  \*\*

\*\*\*\*\*\*

\*\*\*\*\*\*

\*\*  \*\*

\*    \*

"""

rows = 3

for i in range(1, rows + 1):

    for j in range(i):

        print("\*", end="")

    spaces = (rows - i) \* 2

    for j in range(spaces):

        print(" ", end="")

    for j in range(i):

        print("\*", end="")

    print()

for i in range(rows, 0, -1):

    for j in range(i):

        print("\*", end="")

    spaces = (rows - i) \* 2

    for j in range(spaces):

        print(" ", end="")

    for j in range(i):

        print("\*", end="")

    print()

"""

\*\*\*\*\*\*

\*\*  \*\*

\*    \*

\*    \*

\*\*  \*\*

\*\*\*\*\*\*

"""

rows = 3

for i in range(rows, 0, -1):

    for j in range(i):

        print("\*", end="")

    spaces = (rows - i) \* 2

    for j in range(spaces):

        print(" ", end="")

    for j in range(i):

        print("\*", end="")

    print()

for i in range(1, rows + 1):

    for j in range(i):

        print("\*", end="")

    spaces = (rows - i) \* 2

    for j in range(spaces):

        print(" ", end="")

    for j in range(i):

        print("\*", end="")

    print()

"""

1234554321

1234\*\*4321

123\*\*\*\*321

12\*\*\*\*\*\*21

1\*\*\*\*\*\*\*\*1

"""

n=5

for i in range(n):

    for j in range(1, n-i+1):

        print(j, end="")

    for k in range(i):

        print("\*", end="")

    for k in range(i):

        print("\*", end="")

    for j in range(n-i, 0,-1):

        print(j, end="")

    print()

"""

    1

   11

  1\*1

 1\*\*1

11111

"""

for i in range(1, 6):

    for k in range(1, 6 - i):

        print(" ", end="")

    for j in range(i):

        if i == 5 or j == 0 or j == i - 1:

            print("1", end="")

        else:

            print("\*", end="")

    print()

"""

    A

   AB

  A\_C

 A\_\_D

ABCDE

"""

a=65

for i in range(1, 6):

    for k in range(1, 6 - i):

        print(" ", end="")

    for j in range(i):

        if i == 5 or j == 0 or j == i - 1:

            print(chr(a+j), end="")

        else:

            print("\_", end="")

    print()

"""

    1

   10

  101

 1010

10101

"""

for i in range(1, 6):

    for k in range(1, 6 - i):

        print(" ", end="")

    for j in range(i):

        if j%2==0:

            print("1", end="")

        else:

            print("0", end="")

    print()

"""

12345

 1234

  123

   12

    1

"""

for i in range(6,1,-1):

    for j in range(6-i):

        print(" ", end="")

    for j in range(1,i):

        print(j,end="")

    print()

"""

55555

 4444

  333

   22

    1

"""

for i in range(6,1,-1):

    for j in range(6-i):

        print(" ", end="")

    for j in range(1,i):

        print(i-1,end="")

    print()

"""

12345

 1\_\_4

  1\_3

   12

    1

"""

for i in range(6,1,-1):

    for j in range(6-i):

        print(" ", end="")

    for j in range(1,i):

        if i == 6 or j == 1 or j == i - 1:

            print(j, end="")

        else:

            print("\_", end="")

    print()

"""

55555

 4\_\_4

  3\_3

   22

    1

"""

for i in range(6,1,-1):

    for j in range(6-i):

        print(" ", end="")

    for j in range(1,i):

        if i == 6 or j == 1 or j == i - 1:

            print(i, end="")

        else:

            print("\_", end="")

    print()

"""

ABCDE

 A\_\_D

  A\_C

   AB

    A

"""

a=64

for i in range(6,1,-1):

    for j in range(6-i):

        print(" ", end="")

    for j in range(1,i):

        if i == 6 or j == 1 or j == i - 1:

            print(chr(a+j), end="")

        else:

            print("\_", end="")

    print()

"""

ABCDE

 ABCD

  ABC

   AB

    A

"""

a=64

for i in range(6,1,-1):

    for j in range(6-i):

        print(" ", end="")

    for j in range(1,i):

        print(chr(a+j), end="")

    print()

"""

11111

 2222

  333

   44

    5

"""

a=64

for i in range(6,1,-1):

    for j in range(6-i):

        print(" ", end="")

    for j in range(1,i):

        print(i-1, end="")

    print()

"""

    \*

   \* \*

  \* \* \*

 \* \* \* \*

\* \* \* \* \*

"""

n=5

for i in range(n):

    for j in range(n-i-1):

        print(" ",end="")

    for j in range (2\*i+1):

        print("\*", end="")

    print()

"""

    1

   1 2

  1 2 3

 1 2 3 4

1 2 3 4 5

"""

n=5

for i in range(n):

    for j in range(n-i-1):

        print(" ",end="")

    for j in range (i+1):

        print(j+1, end=" ")

    print()

"""

    A

   A B

  A B C

 A B C D

A B C D E

"""

a=65

n=5

for i in range(n):

    for j in range(n-i-1):

        print(" ",end="")

    for j in range (i+1):

        print(chr(a+j), end=" ")

    print()

"""

    X

   X X

  X\_\_X

 X\_\_\_\_X

X X X X X

"""

n = 5

for i in range(n):

    for j in range(n - i - 1):

        print(" ", end="")

    for j in range(i + 1):

        if i == n - 1:

            print("X", end=" ")

        elif j == 0 or j == i:

            print("X", end=" ")

        else:

            print("\_", end=" ")

    print()

"""

    \*

   \*\*\*

  \*\*\*\*\*

 \*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*

"""

n = 5

for i in range(n):

    for j in range(n - i - 1):

        print(" ", end="")

    for j in range(2\*i + 1):

       print("\*",end="")

    print()

"""

    1

   123

  12345

 1234567

123456789

"""

n = 5

for i in range(n):

    for j in range(n - i - 1):

        print(" ", end="")

    for j in range(2\*i + 1):

       print(j+1,end="")

    print()

"""

    A

   ABC

  ABCDE

 ABCDEFG

ABCDEFGHI

"""

a=65

n = 5

for i in range(n):

    for j in range(n - i - 1):

        print(" ", end="")

    for j in range(2\*i + 1):

       print(chr(a+j),end="")

    print()

"""

    \*

   \* \*

  \*\_\_\*

 \*\_\_\_\_\*

\* \* \* \* \*

"""

n = 5

for i in range(n):

    for j in range(n - i - 1):

        print(" ", end="")

    for j in range(i + 1):

        if i == n - 1:

            print("\*", end=" ")

        elif j == 0 or j == i:

            print("\*", end=" ")

        else:

            print("\_", end=" ")

    print()

"""

    1

   1 1

  1 2 1

 1 3 3 1

1 1 1 1 1

"""

n = 5

for i in range(n):

    for j in range(n - i - 1):

        print(" ", end="")

    for j in range(i + 1):

        if i==n-1:

           print("1", end=" ")

        elif j==0 or j==i:

            print("1", end=" ")

        else:

            print(i, end=" ")

    print()

"""

    A

   B B

  C   C

 D     D

EEEEEEEEE

"""

a=65

n = 5

for i in range(n):

    for j in range(n - i - 1):

        print(" ", end="")

    for j in range(i + 1):

        if i==n-1:

           print(chr(a+i), end=" ")

        elif j==0 or j==i:

            print(chr(a+i), end=" ")

        else:

            print(" ", end=" ")

    print()



|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| i/j | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0 |  |  |  |  | # |  |  |  |  |
| 1 |  |  |  | \* | # | \* |  |  |  |
| 2 |  |  | \* | \* | # | \* | \* |  |  |
| 3 |  | \* | \* | \* | # | \* | \* | \* |  |
| 4 | \* | \* | \* | \* | # | \* | \* | \* | \* |



"""

    #

   \*#\*

  \*\*#\*\*

 \*\*\*#\*\*\*

\*\*\*\*#\*\*\*\*

"""

n = 5

for i in range(n):

    for j in range(n - i - 1):

        print(" ", end="")

    for j in range(2 \* i + 1):

        if j == i:

            print("#", end="")

        else:

            print("\*", end="")

    print()

"""

\*\*\*\*\*\*\*\*\*

 \*\*\*\*\*\*\*

  \*\*\*\*\*

   \*\*\*

    \*

"""

n = 5

for i in range(n, 0, -1):

    for j in range(n - i):

        print(" ", end="")

    for j in range(2 \* i - 1):

        print("\*", end="")

    print()

"""

\* \* \* \* \*

 \* \* \* \*

  \* \* \*

   \* \*

    \*

"""

n = 5

for i in range(n, 0, -1):

    for j in range(n - i):

        print(" ", end="")

    for j in range(i - 1):

        print("\*", end=" ")

    print()

"""

123456789

 1234567

  12345

   123

    1

"""

n = 5

for i in range(n, 0, -1):

    for j in range(n - i):

        print(" ", end="")

    for j in range(2\*i - 1):

        print(j+1, end="")

    print()

"""

A B C D E

 A B C D

  A B C

   A B

    A

"""

a=65

n = 6

for i in range(n, 0, -1):

    for j in range(n - i):

        print(" ", end="")

    for j in range(i - 1):

        print(chr(a+j), end=" ")

    print()

"""

5 5 5 5 5

 4 4 4 4

  3 3 3

   2 2

    1

"""

n = 6

for i in range(n, 0, -1):

    for j in range(n - i):

        print(" ", end="")

    for j in range(i - 1):

        print(i-1, end=" ")

    print()

"""

123456789

 1     7

  1   5

   1 3

    1

"""

n = 5

for i in range(n, 0, -1):

    for j in range(n - i):

        print(" ", end="")

    for j in range(2 \* i - 1):

        if i == n:

            print(j + 1, end="")

        elif j == 0 or j == 2 \* i - 2:

            print(j+1, end="")

        else:

            print(" ", end="")

    print()

"""

123456789

 1+++++7

  1+++5

   1+3

    1

"""

n = 5

for i in range(n, 0, -1):

    for j in range(n - i):

        print(" ", end="")

    for j in range(2 \* i - 1):

        if i == n:

            print(j + 1, end="")

        elif j == 0 or j == 2 \* i - 2:

            print(j+1, end="")

        else:

            print("+", end="")

    print()

"""

x

xx

xxx

xxxx

xxx

xx

x

"""

n = 3

for i in range(n):

    for j in range(i+1):

        print("x", end="")

    print()

for i in range(n+1, 0, -1):

    for j in range(i):

        print("x", end="")

    print()

"""

1

12

123

1234

123

12

1

"""

n = 3

for i in range(n):

    for j in range(i+1):

        print(j+1, end="")

    print()

for i in range(n+1, 0, -1):

    for j in range(i):

        print(j+1, end="")

    print()

"""

   1

  12

 123

1234

 123

  12

   1

"""

for i in range(1,5):

    for k in range(1,5-i):

        print(" ", end="")

    for j in range(i):

        print(j+1, end="")

    print()

for i in range(3, 0, -1):

    for k in range(4 - i):

        print(" ", end="")

    for j in range(1, i + 1):

        print(j, end="")

    print()

"""

1

1 2

1  3

1   4

1  3

1 2

1

"""

n = 3

for i in range(n):

    for j in range(i+1):

        if i==0 or j==0 or i==j:

            print(j+1, end=" ")

        else:

            print(" ",end=" ")

    print()

for i in range(n+1, 0, -1):

    for j in range(i):

        if i==0 or j==0 or i==j+1:

            print(j+1, end=" ")

        else:

            print(" ",end=" ")

    print()

"""

   \*

  \*\_\*

 \*\_\*\_\*

\*\_\*\_\*\_\*

 \*\_\*\_\*

  \*\_\*

   \*

"""

n =4

for i in range(n):

    for j in range(n - i - 1):

        print(" ", end="")

    for j in range(2\*i + 1):

        if(j%2!=0):

            print("\_",end="")

        else:

            print("\*", end="")

    print()

for i in range(n-1,0,-1):

    for j in range(n-i):

        print(" ",end="")

    for j in range (2\*i-1, 0, -1):

        if(j%2==0):

            print("\_",end="")

        else:

            print("\*", end="")

    print()

"""

   \*

  \*\*\*

 \*\*\*\*\*

\*\*\*\*\*\*\*

 \*\*\*\*\*

  \*\*\*

   \*

"""

n =4

for i in range(n):

    for j in range(n - i - 1):

        print(" ", end="")

    for j in range(2\*i + 1):

        print("\*",end="")

    print()

for i in range(n-1,0,-1):

    for j in range(n-i):

        print(" ",end="")

    for j in range (2\*i-1, 0, -1):

        print("\*",end="")

    print()

"""

   \*

  \*\_\*

 \*\_\_\_\*

\*\_\_\_\_\_\*

 \*\_\_\_\*

  \*\_\*

   \*

"""

n = 4

for i in range(n):

    for j in range(n - i - 1):

        print(" ", end="")

    for j in range(2 \* i + 1):

        if i == n - 1:

            print("\*", end="")

        elif j == 0 or j == 2 \* i:

            print("\*", end="")

        else:

            print("\_", end="")

    print()

for i in range(n - 2, -1, -1):

    for j in range(n - i - 1):

        print(" ", end="")

    for j in range(2 \* i + 1):

        if j == 0 or j == 2 \* i:

            print("\*", end="")

        else:

            print("\_", end="")

    print()

"""

    1

   212

  32123

 4321234

543212345

"""

n = 5

for i in range(1, n + 1):

    for j in range(n - i):

        print(" ", end="")

    for j in range(i, 0, -1):

        print(j, end="")

    for j in range(2, i + 1):

        print(j, end="")

    print()

"""

\*        \*

\*\*      \*\*

\*\*\*    \*\*\*

\*\*\*\*  \*\*\*\*

\*\*\*\*\*\*\*\*\*\*

"""

rows = 5

for i in range(1, rows + 1):

    for j in range(i):

        print("\*", end="")

    spaces = (rows - i) \* 2

    for j in range(spaces):

        print(" ", end="")

    for j in range(i):

        print("\*", end="")

    print()

"""

\*\*\*\*\*\*\*\*\*\*

\*\*\*\*  \*\*\*\*

\*\*\*    \*\*\*

\*\*      \*\*

\*        \*

"""

"""

rows=5

for i in range(rows, 0, -1):

    for j in range(i):

        print("\*", end="")

    spaces = (rows - i) \* 2

    for j in range(spaces):

        print(" ", end="")

    for j in range(i):

        print("\*", end="")

    print()

"""

"""

\*\*\*\*\*\*\*\*\*\*

\*\*\*\*  \*\*\*\*

\*\*\*    \*\*\*

\*\*      \*\*

\*        \*

\*        \*

\*\*      \*\*

\*\*\*    \*\*\*

\*\*\*\*  \*\*\*\*

\*\*\*\*\*\*\*\*\*\*

"""

rows = 5

for i in range(rows, 0, -1):

    for j in range(i):

        print("\*", end="")

    spaces = (rows - i) \* 2

    for j in range(spaces):

        print(" ", end="")

    for j in range(i):

        print("\*", end="")

    print()

for i in range(1, rows + 1):

    for j in range(i):

        print("\*", end="")

    spaces = (rows - i) \* 2

    for j in range(spaces):

        print(" ", end="")

    for j in range(i):

        print("\*", end="")

    print()

"""

    1

    2

    3

    4

123454321

    4

    3

    2

    1

"""

n = 4

for i in range(1, n + 1):

    for j in range(n):

        print(" ", end="")

    print(i)

for i in range(1, n + 2):

    print(i, end="")

for i in range(n, 0, -1):

    print(i, end="")

print()

for i in range(n, 0, -1):

    for j in range(n):

        print(" ", end="")

    print(i)

"""

     1

    101

   10101

  1010101

 101010101

10101010101

"""

n = 6

for i in range(n):

    for j in range(n - i - 1):

        print(" ", end="")

    for j in range(2 \* i + 1):

        if j % 2 == 0:

            print("1", end="")

        else:

            print("0", end="")

    print()

"""

\*         \*

 \*      \*

   \*  \*

    \*

   \*  \*

 \*      \*

\*         \*

"""

n = 4

for i in range(n):

    for j in range(n):

        print(" " if j != i else "\*", end="")

    for j in range(n - 1, -1, -1):

        print(" " if j != i else "\*", end="")

    print()

for i in range(n - 2, -1, -1):

    for j in range(n):

        print(" " if j != i else "\*", end="")

    for j in range(n - 1, -1, -1):

        print(" " if j != i else "\*", end="")

    print()