#Printing a line, Given_num = 4, here, column_limit = Given_num = 4

	C1	C2	C3	C4
L1	1	2	3	4

#Printing a square, Given_num = 4, here, Column_limit=line_limit = Given_num = 4

	C1	C2	C3	C4	Column_limit= num
L1	1	2	3	4	Column_limit=4
L2	1	2	3	4	Column_limit=4
L3	1	2	3	4	Column_limit=4
L4	1	2	3	4	Column_limit=4

#Printing a rectangle, Given_column_limit =4, Given_line_limit =6

	C1	C2	C3	C4	Column_limit= num
L1	1	2	3	4	Column_limit=4
L2	1	2	3	4	Column_limit=4
L3	1	2	3	4	Column_limit=4
L4	1	2	3	4	Column_limit=4
L5	1	2	3	4	Column_limit=4
L6	1	2	3	4	Column_limit=4

#Printing a Triangle - Left Justified, Given_num = 4

	C1	C2	C3	C4	Column_limit= line_no
L1	1	#	#	#	Column_limit=1
L2	1	2	#	#	Column_limit=2
L3	1	2	3	#	Column_limit=3
L4	1	2	3	4	Column_limit=4

#Printing a Triangle - Right Justified, Given_num = 4

	C1	C2	C3	C4	Number_limit = Line_no	Space_limit = num – line_no
L1	#	#	#	1	Number_limit=1	Space_limit =3
L2	#	#	1	2	Number_limit=2	Space_limit =2
L3	#	1	2	3	Number_limit=3	Space_limit =1
L4	1	2	3	4	Number_limit=4	Space_limit =0

#Printing a Pyramid, Given_num = 4

	C1	C2	C3	C4	C5	C6	C7	Num_limit = 2* line_no-1	Space_limit = num – line_no
L1	#	#	#	1	#	#	#	Num_limit = 2*1-1=1	Space_limit =3
L2	#	#	1	2	3	#	#	Num_limit = 2*2-1=3	Space_limit =2
L3	#	1	2	3	4	5	#	Num_limit = 2*3-1=5	Space_limit =1
L4	1	2	3	4	5	6	7	Num_limit = 2*4-1=7	Space_limit =0

#Printing a Rhombus, Given_num = 4.

A Rhombus is made of 2 parts: 1) A pyramid & 2) a flipped pyramid. Since you already know how to print a pyramid, the flipped pyramid part is illustrated below.

		C1	C2	C3	C4	C5	C6	C7	Space_limit = line_no	Num_limit = 2*(Num-line_no)-1
PYRAMID PART	L1	#	#	#	1	#	#	#		
	L2	#	#	1	2	3	#	#		
	L3	#	1	2	3	4	5	#		
	L4	1	2	3	4	5	6	7		
FLIPPED PYRAMID PART	L1	#	1	2	3	4	5	#	Space_limit =1	2*(4-1)-1=2*3-1=5
	L2	#	#	1	2	3	#	#	Space_limit =2	2*(4-2)-1=2*2-1=3
	L3	#	#	#	1	#	#	#	Space_limit =3	2*(4-3)-1=2*1-1=1

Consider c= column_no, L = line_no

#Printing a Hollow square, Given_num = 4. Use conditions to print the numbers and "#". Numbers are printed, when c=1, c= Given_num, L=1, or L= Given_num, otherwise print "#".

	C1	C2	C3	C4
L1	1	2	3	4
L2	1	#	#	4
L3	1	#	#	4
L4	1	2	3	4

#Printing a Hollow Triangle - Left Justified, Given_num = 6.

Use conditions to print the numbers and “W”.

Numbers are printed, when L=1, L= Given_num, c=1, c= number_limit or column_limit

	C1	C2	C3	C4	C4	C5
L1	1	#	#	#	#	#
L2	1	2	#	#	#	#
L3	1	W	3	#	#	#
L4	1	W	W	4	#	#
L5	1	W	W	W	5	#
L6	1	2	3	4	5	6

#Printing a HOLLOW Triangle - Right Justified, Given_num = 6.

Use conditions to print the numbers and “W”.

Numbers are printed, when L=1, L= Given_num, c=1, c= number_limit or column_limit.

	C1	C2	C3	C4	C5	C6
L1	#	#	#	#	#	1
L2	#	#	#	#	1	2
L3	#	#	#	1	W	3
L4	#	#	1	W	W	4
L5	#	1	W	W	W	5
L6	1	2	3	4	5	6

#Printing a HOLLOW Pyramid, Given_num = 5.

Use conditions to print the numbers and “W”.

Numbers are printed, when c=1, c= number_limit or column_limit, L= Given_num.

	C1	C2	C3	C4	C5	C6	C7	C8	C9
L1	#	#	#	#	1	#	#	#	#
L2	#	#	#	1	W	3	#	#	#
L3	#	#	1	W	W	W	5	#	#
L4	#	1	W	W	W	W	W	7	#
L5	1	2	3	4	5	6	7	8	9

#Printing a HOLLOW Rhombus, Given_num = 4. A Rhombus is made of 2 parts: Hollow Pyramid & a Hollow flipped pyramid. Use conditions to print the numbers and "W".

		C1	C2	C3	C4	C5	C6	C7	Space_limit=line_no	Num_limit = 2(Num-line_no)-1
PYRAMID PART	L1	#	#	#	1	#	#	#		
	L2	#	#	1	W	3	#	#		
	L3	#	1	W	W	W	5	#		
	L4	1	W	W	W	W	W	7		
FLIPPED PYRAMID PART	L1	#	1	W	W	W	5	#	Space_limit= 1	2*(4-1)-1=2*3-1=5
	L2	#	#	1	W	3	#	#	Space_limit= 2	2*(4-2)-1=2*2-1=3
	L3	#	#	#	1	#	#	#	Space_limit= 3	2*(4-3)-1=2*1-1=1

#Printing a Palindromic line. Given_num = 4

Palindrome: A palindrome is a word, number, phrase, or other sequence of characters that reads the same backward as forward, such as *madam* or *racecar, 1234321, 62826*.

	C1	C2	C3	C4	C1	C2	C3
L1	1	2	3	4	3	2	1

#Printing a Palindromic Pyramid, Given_num = 4

	C1	C2	C3	C4	C5	C6	C7	Print palindromic line for line_numbers
L1	#	#	#	1	#	#	#	Print palindromic line for 1
L2	#	#	1	2	1	#	#	Print palindromic line for 2
L3	#	1	2	3	2	1	#	Print palindromic line for 3
L4	1	2	3	4	3	2	1	Print palindromic line for 4

#Printing a 'Z' using '*".

Approach-1: modify the square: Use conditions to print the numbers and "W".

Given_num = 5. Here, Column_limit = line_limit = Given_num = 5.

Green Numbers are printed, when L=1, L= Given_num.

	C1	C2	C3	C4	C5	
L1	1	2	3	4	5	Pink number printed at column 5
L2	W	W	W	4	W	Pink number printed at column 4
L3	W	W	3	W	W	Pink number printed at column 3
L4	W	2	W	W	W	Pink number printed at column 2
L5	1	2	3	4	5	Pink number printed at column 1

Approach-2: modify the **Right Justified Triangle.**

Use conditions to print the numbers, “W”, and “#”. Given_num = 4.

Here, Column_limit = line_limit = Given_num = 4.

	C1	C2	C3	C4	C5	C6
L1	*	*	*	*	*	*
L2	#	#	#	#	*	W
L3	#	#	#	*	W	W
L4	#	#	*	W	W	W
L5	#	*	W	W	W	W
L6	*	*	*	*	*	*