**Pattern 1**

n=**5  
for** i **in** range (n, **0**, -**1**):  
 print((n-i) \* **''** + i \* **'\*'**)

output  
 *# \*\* \*\* \*  
 # \*\* \*\*  
 # \*\* \*  
 # \*\*  
 # \**

***Pattern2***

*# star pattern 1*i=**1  
while** i<=**5**:  
 j=**1  
 while** j<=**5**:  
 print(**"\*"**,end=**""**)  
 j=j+**1** print()  
 i=i+**1**

Output

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Pattern 3

*# star pattern 2*limit=**10**i=**1  
while** i<=limit: *# outer loopDemo for line printig* k=**1  
 while** k<=(limit -i): *# first innerloop for space print* print(**" "**,end=**""**)  
 k=k+**1** j=**1  
 while** j<=i: *# 2nd innerloop for \* printing* print(**"\*"**,end=**" "**)  
 j=j+**1** print()  
 i=i+**1**

**output**

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**Pattern 4**

*# star pattern 1*limit =int(input(**"enter the number "**))  
*#limit=5*i=**1  
while** i <=limit:  
 k=**1  
 while** k<=(limit-i):  
 print(**" "**,end=**""**)  
 k=k+**1** j=**1  
 while** j<=i:  
 print(j,end=**" "**)  
 j=j+**1** print()  
 i=i+**1**

Output

enter the number :10

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

1 2 3 4 5 6

1 2 3 4 5 6 7

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9 10

**Pattern 5**

*# star pattern 2*limit=**5**i=**1  
while** i<=limit: *# outer loopDemo for line printig* k=**1  
 while** k<=(limit -i): *# first innerloop for space print* print(**" "**,end=**""**) *# same line il thanne printing nadakkanayit anu engane end="" kodukunath* k=k+**1** j=**1  
 while** j<=i: *# 2nd innerloop for \* printing* print(j,end=**" "**)  
 j=j+**1** print()  
 i=i+**1**

Output

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

Inverted star pattern

#Using for loop

n=**5  
for** i **in** range (n, **0**, -**1**):  
 print((n-i) \* **' '** + i \* **'\*'**)

output

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***# using recurssion*****def** inverted\_star\_pattern\_recursive(height):  
 **if** height > **0**:  
 print(**"\*"** \* height)  
 inverted\_star\_pattern\_recursive(height - **1**)  
  
  
height = **6**inverted\_star\_pattern\_recursive(height)

Output

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*# Number of rows-chatgpt*rows = **5***# Loop through the number of rows***for** i **in** range(rows, **0**, -**1**):  
 *# Print stars for each row* print(**'\*'** \* i)

Output

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**Different patterns chatgpt**

**Right-Angled Triangle**

rows = 5

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

print('\*' \* i)

**Output:**

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**2. Inverted Right-Angled Triangle**

rows = 5

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

print('\*' \* i)

**Output:**

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**3. Pyramid Pattern**

rows = 5

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

print(' ' \* (rows - i) + '\*' \* (2 \* i - 1))

**Output:**

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**4. Inverted Pyramid Pattern**

rows = 5

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

print(' ' \* (rows - i) + '\*' \* (2 \* i - 1))

**Output:**

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**5. Diamond Pattern**

rows = 5

# Upper part of the diamond

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

print(' ' \* (rows - i) + '\*' \* (2 \* i - 1))

# Lower part of the diamond

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

print(' ' \* (rows - i) + '\*' \* (2 \* i - 1))

**Output:**

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**6. Right-Angled Triangle with Numbers**

rows = 5

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

print(''.join(str(j) for j in range(1, i + 1)))

**Output:**

1

12

123

1234

12345

**7. Mirrored Right-Angled Triangle**

rows = 5

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

print(' ' \* (rows - i) + '\*' \* i)

**Output:**

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**8. Half Diamond Pattern**

rows = 5

# Upper part of the half diamond

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

print('\*' \* i)

# Lower part of the half diamond

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

print('\*' \* i)

**Output:**

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**9. Hollow Square Pattern**

rows = 5

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

if i == 1 or i == rows:

print('\*' \* rows)

else:

print('\*' + ' ' \* (rows - 2) + '\*')

**Output:**

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**10. Hollow Diamond Pattern**

rows = 5

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

print(' ' \* (rows - i) + '\*' + ' ' \* (2 \* i - 3) + ('\*' if i > 1 else ''))

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

print(' ' \* (rows - i) + '\*' + ' ' \* (2 \* i - 3) + ('\*' if i > 1 else ''))

**Output:**

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