# Star Pattern Programs in Python

## 1. Right Triangle Star Pattern

n = int(input("Enter number of rows: "))  
for i in range(1, n + 1):  
 print("\*" \* i)

## 2. Inverted Right Triangle

n = int(input("Enter number of rows: "))  
for i in range(n, 0, -1):  
 print("\*" \* i)

## 3. Pyramid Pattern

n = int(input("Enter number of rows: "))  
for i in range(n):  
 print(" " \* (n - i - 1) + "\*" \* (2 \* i + 1))

## 4. Inverted Pyramid

n = int(input("Enter number of rows: "))  
for i in range(n, 0, -1):  
 print(" " \* (n - i) + "\*" \* (2 \* i - 1))

## 5. Diamond Pattern

n = int(input("Enter number of rows: "))  
for i in range(n):  
 print(" " \* (n - i - 1) + "\*" \* (2 \* i + 1))  
for i in range(n - 2, -1, -1):  
 print(" " \* (n - i - 1) + "\*" \* (2 \* i + 1))

## 6. Square Pattern

n = int(input("Enter number of rows: "))  
for i in range(n):  
 print("\*" \* n)

## 7. Hollow Square Pattern

n = int(input("Enter number of rows: "))  
for i in range(n):  
 for j in range(n):  
 if i == 0 or i == n - 1 or j == 0 or j == n - 1:  
 print("\*", end="")  
 else:  
 print(" ", end="")  
 print()

## 8. Pascal’s Triangle Pattern

n = int(input("Enter number of rows: "))  
for i in range(n):  
 print(" " \* (n - i), end="")  
 num = 1  
 for j in range(i + 1):  
 print(num, end=" ")  
 num = num \* (i - j) // (j + 1)  
 print()