**a.**

**# \***

**# \* \***

**# \* \***

**# \* \***

**# \* \***

**# \* \***

**# \* \***

**# \* \***

**# \* \***

**# \***

**n = 5**

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

**for j in range(1,n+1):**

**if j + i == (n + 1):**

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

**else:**

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

**for j in range(2,n+1):**

**if i == j:**

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

**else:**

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

**print()**

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

**for j in range(1,n+1):**

**if j == i:**

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

**else:**

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

**for j in range(1,n):**

**if j + i == n:**

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

**else:**

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

**print()**

**b.**

**# \***

**# \* \***

**# \* \* \***

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

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

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

**# \* \* \***

**# \* \***

**# \***

**n = 5**

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

**for j in range(n):**

**if j < i:**

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

**print()**

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

**for j in range(1,n):**

**if i <= j:**

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

**print()**

**c.**

**# 1**

**# 1 2**

**# 1 3**

**# 1 4**

**# 1 2 3 4 5**

**n = 5**

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

**for j in range(1, n+1):**

**if j == 1 or i == j or i == n:**

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

**else:**

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

**print()**

**d.**

**# 1**

**# 2 3 2**

**# 3 4 5 4 3**

**# 4 5 6 7 6 5 4**

**# 5 6 7 8 9 8 7 6 5**

**n = 5**

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

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

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

**x = i**

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

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

**x += 1**

**x -= 2**

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

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

**x -= 1**

**print()**

**e.**

**# 1**

**# 1 2**

**# 1 3**

**# 1 4**

**# 1 2 3 4 5**

**n = 5**

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

**print(" "\*(n-i),end=" ")**

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

**if j == 1 or j == i or i == n:**

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

**else:**

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

**print()**

**f.**

**# 1 2 3 4 5**

**# 2 5**

**# 3 5**

**# 4 5**

**# 5**

**n = 5**

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

**for j in range(1, n+1):**

**if j == 1:**

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

**for j in range(2, n+1):**

**if i == 1:**

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

**for j in range(n-1,1,-1):**

**if j == i:**

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

**else:**

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

**print()**

**g.**

**# 1**

**# 1 2 1**

**# 1 2 3 2 1**

**# 1 2 3 4 3 2 1**

**# 1 2 3 4 5 4 3 2 1**

**n = 5**

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

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

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

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

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

**x = i**

**x -= 1**

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

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

**x -= 1**

**print()**

**h.**

**# 1 1**

**# 1 2 2 1**

**# 1 2 3 3 2 1**

**# 1 2 3 4 4 3 2 1**

**# 1 2 3 4 5 4 3 2 1**

**n = 5**

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

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

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

**for j in range(1,n+1):**

**if i < j:**

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

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

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

**for j in range(n-1,0,-1):**

**if j <= i:**

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

**print()**