## **Solve these question on both Python and Javascript**

## **Pattern #1: Simple Number Triangle Pattern**

Pattern:

1

2 2

3 3 3

4 4 4 4

Ans-- rows=4

for i in range(rows+1):

for j in range(i):

print(i,end=' ')

print('')

## **Pattern #2: Inverted Pyramid of Numbers**

Pattern:

1 1 1 1 1

2 2 2 2

3 3 3

4 4

5

Ans -- rows = 5

b = 0

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

    b += 1

    for j in range(1, i + 1):

        print(b, end=’ ‘)

    print(‘\r’)

## **Pattern #3: Half Pyramid Pattern of Numbers**

Pattern:

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

Ans---- rows = 5

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

for column in range(1, row + 1):

print(column, end=’ ‘)

print(“”)

## **Pattern #4: Inverted Pyramid of Descending Numbers**

Pattern:

5 5 5 5 5

4 4 4 4

3 3 3

2 2

1

Ans--- rows = 5

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

    num = i

    for j in range(0, i):

        print(num, end=’ ‘)

    print(“\r”)

## **Pattern #5: Inverted Pyramid of the Same Digit**

Pattern:

5 5 5 5 5

5 5 5 5

5 5 5

5 5

5

Ans---- rows = 5

num = rows

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

    for j in range(0, i):

        print(num, end=’ ‘)

    print(“\r”)

## **Pattern #6: Reverse Pyramid of Numbers**

Pattern:

1

2 1

3 2 1

4 3 2 1

5 4 3 2 1

Ans---- rows = 6

for row in range(1, rows):

    for column in range(row, 0, -1):

        print(column, end=’ ‘)

    print(“”)

## Pattern #7: Inverted Half Pyramid Number Pattern

**Pattern:**

0 1 2 3 4 5

0 1 2 3 4

0 1 2 3

0 1 2

0 1

**Code:**

rows = 5

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

    for j in range(0, i + 1):

        print(j, end=’ ‘)

    print(“\r”)

## Pattern #8: Pyramid of Natural Numbers Less Than 10

**Pattern:**

1

2 3 4

5 6 7 8 9

**Code:**

currentNumber = 1

stop = 2

rows = 3 # Rows you want in your pattern

for i in range(rows):

    for column in range(1, stop):

        print(currentNumber, end=’ ‘)

        currentNumber += 1

    print(“”)

    stop += 2

## Pattern #9: Reverse Pattern of Digits from 10

**Pattern:**

1

3 2

6 5 4

10 9 8 7

**Code:**

start = 1

stop = 2

currentNumber = stop

for row in range(2, 6):

    for col in range(start, stop):

        currentNumber -= 1

        print(currentNumber, end=’ ‘)

    print(“”)

    start = stop

    stop += row

    currentNumber = stop

## Pattern #10: Unique Pyramid Pattern of Digits

**Pattern:**

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

**Code:**

rows = 6

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

    for j in range(1, i – 1):

        print(j, end=” “)

    for j in range(i – 1, 0, -1):

        print(j, end=” “)

    print()

## Pattern #11: Connected Inverted Pyramid Pattern of Numbers

**Pattern:**

5 4 3 2 1 1 2 3 4 5

5 4 3 2 2 3 4 5

5 4 3 3 4 5

5 4 4 5

5 5

**Code:**

rows = 6

for i in range(0, rows):

    for j in range(rows – 1, i, -1):

        print(j, ”, end=”)

    for l in range(i):

        print(‘ ‘, end=”)

    for k in range(i + 1, rows):

        print(k, ”, end=”)

    print(‘\n’)

## Pattern #12: Even Number Pyramid Pattern

**Pattern:**

10

10 8

10 8 6

10 8 6 4

10 8 6 4 2

**Code:**

rows = 5

LastEvenNumber = 2 \* rows

evenNumber = LastEvenNumber

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

    evenNumber = LastEvenNumber

    for j in range(i):

        print(evenNumber, end=’ ‘)

        evenNumber -= 2

    print(“\r”)

## Pattern #13: Pyramid of Horizontal Tables

**Pattern:**

0

0 1

0 2 4

0 3 6 9

0 4 8 12 16

0 5 10 15 20 25

0 6 12 18 24 30 36

**Code:**

rows = 7

for i in range(0, rows):

    for j in range(0, i + 1):

        print(i \* j, end=’ ‘)

    print()

## Pattern #14: Pyramid Pattern of Alternate Numbers

**Pattern:**

1

3 3

5 5 5

7 7 7 7

9 9 9 9 9

**Code:**

rows = 5

i = 1

while i <= rows:

    j = 1

    while j <= i:

        print((i \* 2 – 1), end=” “)

        j = j + 1

    i = i + 1

    print()

## Pattern #15: Mirrored Pyramid (Right-angled Triangle) Pattern of Numbers

**Pattern:**

           1

         1 2

      1 2 3

   1 2 3 4

 1 2 3 4 5

**Code:**

rows = 6

for row in range(1, rows):

    num = 1

    for j in range(rows, 0, -1):

        if j > row:

            print(” “, end=’ ‘)

        else:

            print(num, end=’ ‘)

            num += 1

    print(“”)

## Pattern #16: Equilateral Triangle with Stars (Asterisk Symbol)

**Pattern:**

            \*

           \* \*

          \* \* \*

         \* \* \* \*

        \* \* \* \* \*

       \* \* \* \* \* \*

      \* \* \* \* \* \* \*

**Code:**

print(“Print equilateral triangle Pyramid using stars “)

size = 7

m = (2 \* size) – 2

for i in range(0, size):

    for j in range(0, m):

        print(end=” “)

    m = m – 1 # decrementing m after each loop

    for j in range(0, i + 1):

        # printing full Triangle pyramid using stars

        print(“\* “, end=’ ‘)

    print(” “)

## Pattern #17: Downward Triangle Pattern of Stars

**Pattern:**

        \* \* \* \* \* \*

         \* \* \* \* \*

          \* \* \* \*

           \* \* \*

            \* \*

             \*

**Code:**

rows = 5

k = 2 \* rows – 2

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

    for j in range(k, 0, -1):

        print(end=” “)

    k = k + 1

    for j in range(0, i + 1):

        print(“\*”, end=” “)

    print(“”)