Pattern codes

1. Take no of rows from the user

   ROWS = 3

   ```
   *   *   *
   *   *   *
   *   *   *
   ```

2. Take no of rows & cols from the user

   ROWS = 3

   Col = 4

   ```
   1   2   3   4
   5   6   7   8
   9   10  11  12
   ```

3. Take no of rows from the user

   ROWS = 3

   ```
   a   b   c
   d   e   f
   g   h   i
   ```

4. Take no of rows from the user

   ROWS = 3

   ```
   1   1   1
   2   2   2
   3   3   3
   ```

5. Take no of rows from the user

   ROWS = 4

   ```
   4   4   4   4
   3   3   3   3
   2   2   2   2
   1   1   1   1
   ```

6. Take no of rows from the user

   ROWS = 3

9 8 7
6 5 4
3 2 1

7. Take no of rows from the user
ROWS = 3

A A A
B B B
C C C

8. Take no of rows from the user
ROWS = 3

1 3 5
7 9 11
13 15 17

9. Take no of rows from the user
ROWS = 4

1 2 3 4
a b c d
5 6 7 8
e f g h

10. **Take no of rows from the user ROWS = 3**

1 4 7
10 13 16
19 22 25

1. **Take no of rows from the user ROWS = 4**

d d d d
c c c c
b b b b
a a a a

1. **Take no of rows from the user ROWS = 3**

a B c
d E f
g H i

2. Take no of rows from the user ROWS = 3

```
1 2 3
2 3 4
3 4 5
```

3. Take no of rows from the user ROWS = 4

```
D D D D
C C C C
B B B B
A A A A
```

4. Take no of rows from the user ROWS = 3

```
9 64 7
36 5 16
3 4 1
```

5. Take no of rows from the user ROWS = 3

```
A b C
d E f
G h I
```

6. Take no of rows from the user ROWS = 3

```
1 3 5
5 7 9
9 11 13
```

7. Take no of rows & col from the user ROWS = 6 Col = 4

```
1 2 3 4
a b c d
# # # #
```

5 6 7 8
e f g h
# # # #

1. Take no of rows from the user ROWS = 4

D c B a
a B c D
F e D c
b C d E

1. Take no of rows from the user ROWS = 4

1 4 7 10
7 10 13 16
13 16 19 22
19 22 25 28

1. Take no of rows from the user ROWS = 3

*****
*** ***
*** * ***

2. Take no of rows from the user ROWS = 4

1
2 3
4 5 6
7 8 9 10

3. Take no of rows from the user ROWS = 4

1
2 2
3 3 3
4 4 4 4

4. Take no of rows from the user ROWS = 4

1
1 2
1 2 3
1 2 3 4

5. Take no of rows from the user ROWS = 4

```
a
b   c
d   e   f
g   h   i   j
```

6. Take no of rows from the user ROWS = 4

```
4
3   3
2   2   2
1   1   1   1
```

7. Take no of rows from the user ROWS = 3

```
c
b   b
a   a   a
```

8. Take no of rows from the user ROWS = 4

```
1
2   4
3   6   9
4   8   12  16
```

9. Take no of rows from the user ROWS = 3

```
3
6   9
12  15  18
```

ROWS = 4

```
4
8   12
16  20  24
28  32  36  40
```

10. Take no of rows from the user ROWS = 4

```
10
I       H
7       6       5
D       C       B       A
```

1. Take no of rows from the user ROWS = 4

```
1       2       3       4
1       2       3
1       2
1
```

2. Take no of rows from the user ROWS = 4

```
*       *       *       *
*       *       *
*       *
*
```

3. Take no of rows from the user ROWS = 4

```
1       2       3       4
5       6       7
8       9
10
```

4. Take no of rows from the user ROWS = 4

```
4       3       2       1
3       2       1
2       1
1
```

5. Take no of rows from the user ROWS = 4

```
a       b       c       d
a       b       c
a       b
a
```

6. Take no of rows from the user ROWS = 5

```
1    2    3    4    5
2    3    4    5
3    4    5
4    5
5
```

7. Take no of rows from the user ROWS = 4

```
d    d    d    d
C    C    C
b    b
A
```

ROWS = 3

```
c    c    c
B    B
a
```

8. Take no of rows from the user ROWS = 4

```
D    C    B    A
C    B    A
B    A
A
```

9. Take no of rows from the user ROWS = 4

```
4    3    2    1
C    B    A
2    1
A
```

10. Take no of rows from the user ROWS = 4

```
1    2    3    4
4    5    6
6    7
```

7

1. Take no of rows from the user ROWS = 4

```
4 3 2 1
4 3 2
4 3
4
```

1. Take no of rows from the user ROWS = 5

```
5 D 3 B 1
D 3 B 1
3 B 1
B 1
1
```

1. Take no of rows from the user ROWS = 4

```
      1
    1 2
  1 2 3
1 2 3 4
```

2. Take no of rows from the user ROWS = 4

```
      4
    4 3
  4 3 2
4 3 2 1
```

3. Take no of rows from the user ROWS = 4

```
      d
    c c
  b b b
a a a a
```

4. Take no of rows from the user ROWS = 3

```
      1
    4 7
10 13 16
```

rows=4

```
                1
            5   9
        13  17  21
    25  29  33  37
```

5. Take no of rows from the user ROWS = 4

```
            D
        c   D
    B   c   D
a   B   c   D
```

6. Take no of rows from the user ROWS = 5

```
                5
            5   6
        5   4   3
    5   6   7   8
5   4   3   2   1
```

7. Take no of rows from the user ROWS = 5

```
                A
            b   a
        C   E   G
    d   c   b   a
E   G   I   K   M
```

8. Take no of rows from the user ROWS = 3

```
            1
        A   b
    1   2   3
A   b   C   d
```

9. Take no of rows & col from the user ROWS =4

```
                4
            3   6
        2   4   6
    1   2   3   4
```

1. Take no of rows from the user ROWS = 5

```
                1
            1   b
        1   b   2
    1   b   2   d
1   b   2   d   3
```

1. Take no of rows from the user ROWS = 5

```
1
1   2
2   3   4
4   5   6   7
7   8   9   10  11
```

10. Take no of rows & col from the user ROWS =4

```
1
4   9
64  125 216
2401 4096 6561 10000
```

Space added

```
_   _   _   1
_   _   4   9
_   64  125 216
2401 4096 6561 10000
```

1. Take no of rows from the user ROWS = 3

```
    *   *   *   *
        *   *   *
            *   *
                *
```

2. Take no of rows from the user ROWS = 3

```
1 2 3 4
  5 6 7
    8 9
      10
```

3. Take no of rows from the user ROWS = 3

```
1 2 3 4
  1 2 3
    1 2
      1
```

4. Take no of rows from the user ROWS = 4

```
d d d d
  c c c
    b b
      a
```

5. Take no of rows from the user ROWS = 4

```
a B c D
  E f G
    h I
      J
```

6. Take no of rows from the user ROWS = 4

```
1 2 3 4
  2 3 4
    3 4
      4
```

7. Take no of rows from the user ROWS = 4

```
4 3 2 1
  3 2 1
    2 1
      1
```

8. Take no of rows from the user ROWS = 4

```
D D D D
  c c c
```

```
        B   B
            a
```

9. Take no of rows from the user ROWS = 4

```
100   9   64   7
      36  5    16
          3    4
               1
```

10. Take no of rows from the user ROWS = 4

```
a     B   c    D
      e   F    g
          H    i
               J
```

11. Take no of rows from the user ROWS = 5

```
1     3   5    7    9
      9   7    5    3
          3    5    7
               7    5
                    5
```

12. Take no of rows from the user ROWS = 4

```
A     b   C    d
      e   G    i
          K    n
               q
```

1. Take no of rows from the user ROWS = 4

```
                 *
            *    *    *
       *    *    *    *    *
  *    *    *    *    *    *    *
```

2. Take no of rows from the user ROWS = 4

```
                 4
            3    3    3
       2    2    2    2    2
  1    1    1    1    1    1    1
```

3. Take no of rows from the user ROWS = 4

```
                1
            1   2   1
        1   2   3   2   1
    1   2   3   4   3   2   1
```

4. Take no of rows from the user ROWS = 4

```
                4
            4   3   4
        4   3   2   3   4
    4   3   2   1   2   3   4
```

5. Take no of rows from the user ROWS = 4

```
                d
            c   c   c
        b   b   b   b   b
    a   a   a   a   a   a   a
```

6. Take no of rows from the user ROWS = 4

```
                d
            C   C   C
        b   b   b   b   b
    A   A   A   A   A   A   A
```

7. Take no of rows from the user ROWS = 4

```
                1
            4   7   4
        7   10  13  10  7
    10  13  16  19  16  13  10
```

8. Take no of rows from the user ROWS = 4

```
                D
            c   D   c
        B   c   D   c   B
    a   B   c   D   c   B   a
```

9. Take no of rows from the user ROWS = 5

```
                5
            5   6   5
        5   4   3   4   5
    5   6   7   8   7   6   5
5   4   3   2   1   2   3   4   5
```

10. Take no of rows from the user ROWS = 5

```
                A
            b   a   b
        C   E   G   E   C
    d   c   b   a   b   c   d
E   G   I   K   M   K   I   G   E
```

11. Take no of rows from the user ROWS = 4

```
            1
        A   b   A
    1   2   3   2   1
A   b   C   d   C   b   A
```

12. Take no of rows & col from the user ROWS =4

```
            4
        3   6   3
    2   4   6   4   2
1   2   3   4   3   2   1
```

1. Take no of rows from the user ROWS = 4

```
*   *   *   *   *   *   *
    *   *   *   *   *
        *   *   *
            *
```

2. Take no of rows from the user ROWS = 3

```
1   2   3   4   5
    6   7   8
        9
```

3. Take no of rows from the user ROWS = 4

```
1       2       3       4       5       6       7
        1       2       3       4       5
                1       2       3
                        1
```

4. Take no of rows from the user ROWS = 4

```
        1       2       3       4       3       2       1
                2       3       4       3       2
                        3       4       3
                                4
```

5. Take no of rows from the user ROWS = 4

```
        d       d       d       d       d       d       d
                c       c       c       c       c
                        b       b       b
                                a
```

6. Take no of rows from the user ROWS = 4

```
        1       2       3       4       3       2       1
                1       2       3       2       1
                        1       2       1
                                1
```

7. Take no of rows from the user ROWS = 4

```
        4       3       2       1       2       3       4
                3       2       1       2       3
                        2       1       2
                                1
```

8. Take no of rows from the user ROWS = 4

```
        D       C       B       A       B       C       D
                c       b       a       b       c
                        B       A       B
                                a
```

9. Take no of rows from the user ROWS = 4

```
A0      B1      C2      D3      E4      F5      G6
        H2      I3      J4      K5      L6
                M4      N5      O6
                        P6
```

10. Take no of rows from the user ROWS = 4

```
*   *   *   #   *   *   *
    *   *   #   *   *
        *   #   *
            #
```

11. Take no of rows from the user ROWS = 4

```
7   6   5   4   3   2   1
    5   4   3   2   1
        3   2   1
            1
```

12. Take no of rows from the user ROWS = 5

```
        1   3   5   7   9   7   5   3   1
            9   7   5   3   5   7   9
                3   5   7   5   3
                    7   5   7
                        5
```

Hint use an extra variable

1. Take no of rows from the user ROWS = 4

```
*
*   *
*   *   *
*   *   *   *
*   *   *
*   *
*
```

2. Take no of rows from the user ROWS = 4

```
1
1   2
1   2   3
1   2   3   4
1   2   3
1   2
1
```

3. Take no of rows from the user ROWS = 4

```
1
2   1
```

```
3   2   1
4   3   2   1
3   2   1
2   1
1
```

4. **Take no of rows from the user ROWS = 4**

```
4
3   3
2   2   2
1   1   1   1
2   2   2
3   3
4
```

5. **Take no of rows from the user ROWS = 4**

```
    3
    2   3
    1   2   3
    0   1   2   3
    1   2   3
    2   3
    3
```

6. **Take no of rows from the user ROWS = 3**

```
    *
    *   *   *
    *   *   *   *   *
    *   *   *
    *
```

7. **Take no of rows from the user ROWS = 3**

```
    1
    1   2   3
    1   2   3   4   5
    1   2   3
```

```
1
```

8. Take no of rows from the user ROWS = 4

```
D
C   D
B   C   D
A   B   C   D
B   C   D
C   D
D
```

9. Take no of rows from the user ROWS = 3

```
1
3 2 1
5 4 3 2 1
3 2 1
1
```

10. Take no of rows from the user ROWS = 4

```
1
2   4
3   6   9
4   8   12  16
3   6   9
2   4
1
```

11. Take no of rows from the user ROWS = 4

```
1
1   4
4   7   10
10  13  16  19
19  22  25
25  28
28
```

1. Take no of rows from the user ROWS = 4

```
        *
    *   *
*   *   *
```

```
*   *   *   *
    *   *   *
        *   *
            *
```

2. **Take no of rows from the user** **ROWS = 4**

```
            1
        1   2
    1   2   3
1   2   3   4
    1   2   3
        1   2
            1
```

3. **Take no of rows from the user** **ROWS = 4**

```
            1
        2   1
    3   2   1
4   3   2   1
    3   2   1
        2   1
            1
```

4. **Take no of rows from the user** **ROWS = 4**

```
            4
        3   3
    2   2   2
1   1   1   1
    2   2   2
        3   3
            4
```

5. **Take no of rows from the user** **ROWS = 4**

```
            3
        2   3
    1   2   3
```

```
0 1 2 3
  1 2 3
    2 3
      3
```

6. Take no of rows from the user ROWS = 3

```
      *
    * * *
* * * * *
    * * *
      *
```

7. Take no of rows from the user ROWS = 3

```
      1
    1 2 3
1 2 3 4 5
    1 2 3
      1
```

8. Take no of rows from the user ROWS = 4

```
      D
    C D
  B C D
A B C D
  B C D
    C D
      D
```

9. Take no of rows from the user ROWS = 4

```
      1
    2 4
  3 6 9
```

```
    4    8    12   16
         3    6    9
              2    4
                   1
```

10. Take no of rows from the user ROWS = 3

```
                   1
              3    2    1
    5    4    3    2    1
              3    2    1
                   1
```

11. Take no of rows from the user ROWS = 4

```
                   1
              1    4
         4    7    10
    10   13   16   19
         19   22   25
              25   28
                   28
```

12. Take no of rows from the user ROWS = 4

```
                   1
              1    2
         2    3    4
    4    5    6    7
         7    8    9
              9    10
                   10
```

13. Take no of rows from the user ROWS = 4

```
                   A
              a    b
         B    C    D
    d    e    f    g
         G    H    I
              i    j
                   J
```

1. Take no of rows from the user ROWS = 4

```
                   *
```

```
        *   *   *
    *   *   *   *   *
*   *   *   *   *   *   *
    *   *   *   *   *
        *   *   *
            *
```

2. Take no of rows from the user ROWS = 4

```
        1
    2   2   2
3   3   3   3   3
4   4   4   4   4   4
3   3   3   3   3
    2   2   2
        1
```

3. Take no of rows from the user ROWS = 4

```
            1
        1   2   1
    1   2   3   2   1
1   2   3   4   3   2   1
    1   2   3   2   1
        1   2   1
            1
```

4. Take no of rows from the user ROWS = 4

```
        1
    2   1   2
3   2   1   2   3
4   3   2   1   2   3   4
3   2   1   2   3
    2   1   2
        1
```

5. Take no of rows from the user ROWS = 4

```
        4
    3   3   3
```

```
      2     2     2     2     2
1     1     1     1     1     1
      2     2     2     2     2
            3     3     3
                  4
```

6. Take no of rows from the user ROWS = 3

```
                  A
            b     b     b
      C     C     C     C     C
d     d     d     d     d     d
      C     C     C     C     C
            b     b     b
                  A
```

7. Take no of rows from the user ROWS = 3

```
                  A
            b     A     b
      C     b     A     b     C
d     C     b     A     b     C     d
      C     b     A     b     C
            b     A     b
                  A
```

8. Take no of rows from the user ROWS = 4

```
                  D
            D     C     D
      D     C     B     C     D
D     C     B     A     B     C     D
      D     C     B     C     D
            D     C     D
                  D
```

9. Take no of rows from the user ROWS = 4

```
                  1
            4     2     4
```

```
        9       6       3       6       9
16      12      8       4       8       12      16
        9       6       3       6       9
                4       2       4
                        1
```

10. Take no of rows from the user ROWS = 4

```
*       *       *       *       *       *       *
*       *       *               *       *       *
*       *                               *       *
*                                               *
*       *                               *       *
*       *       *               *       *       *
*       *       *       *       *       *       *
```

1. Take no of rows from the user ROWS = 3

```
          1
        3 2 1
      5 4 3 2 1
        3 2 1
          1
```

2. Take no of rows from the user ROWS = 4

```
            1
          1   b   3
        1   b   3   d   5
      1   b   3   d   5   f   7
```

3. Take no of rows from the user ROWS = 4

```
g       6       e       4       c       2       a
        5       d       3       b       1
                c       2       a
                        1
```

4. Take no of rows from the user ROWS = 4

```
                        1
                4       2       4
        9       6       3       6       9
16      12      8       4       8       12      16
```

9 6 3 6 9
4 2 4
1