```
1 2
    1 2 3
    1 2 3 4
    1 2 3 4 5
[ ] # Example - 6
    for i in range(5, 0, -1):
        for j in range(i, 6):
            print(j, end=" ")
        print()
    5
    4 5
    3 4 5
    2 3 4 5
    1 2 3 4 5
[] # Example - 7
    for i in range(1, 6):
        for j in range(i, 0, -1):
            print(j, end=" ")
        print()
    1
    2 1
    3 2 1
    4 3 2 1
    5 4 3 2 1
[] # Example - 8
    for i in range(4, -1, -1):
        for j in range(5, i, -1):
            print(j, end=" ")
        print()
    5
    5 4
    5 4 3
    5 4 3 2
    5 4 3 2 1
[ ] # Example - 9
    for i in range(1, 6):
        for j in range(0, i):
            print(i, end=" ")
        print()
    1
    2 2
    3 3 3
    4 4 4 4
    5 5 5 5 5
[ ] # Example - 10
    for i in range(5, 0, -1):
        for j in range(i, 6):
            print(i, end=" ")
        print()
```

```
5
    4 4
    3 3 3
    2 2 2 2
    11111
[ ] # Example - 11
    for i in range(5, 0, -1):
       for j in range(0, i):
          print(i, end=" ")
        print()
    5 5 5 5 5
    4 4 4 4
    3 3 3
    2 2
    1
[ ] # Example - 12
    for i in range(1, 6):
        for j in range(i, 6):
           print(i, end=" ")
        print()
    11111
    2 2 2 2
    3 3 3
    4 4
    5
[ ] # Example - 13
    for i in range(5, 0, -1):
        if(i\%2 == 0):
           for j in range(i, 0, -1):
              print(j, end=" ")
        else:
           for k in range(1, i+1):
              print(k, end=" ")
        print()
    1 2 3 4 5
    4 3 2 1
    1 2 3
[ ] # Example - 14
    for i in range(8, 0, -2):
       for j in range(1, i):
           print(j, end=" ")
        print()
    1 2 3 4 5 6 7
    1 2 3 4 5
    1 2 3
[ ] # Example - 15
    for i in range(1, 6):
       for j in range(i, i+i):
            print(j%2, end=" ")
      print()
```

```
0 1
    101
    0101
    10101
[ ] # Example - 16
    for i in range(2, 7):
        for j in range(1, i):
            print(j%2, end=" ")
        print()
    1
    1 0
    1 0 1
    1010
    10101
[ ] # Example - 17
    for i in range(1, 10, 2):
        for j in range(i, 10, 2):
            print(j, end=" ")
        print()
    1 3 5 7 9
    3 5 7 9
    5 7 9
    7 9
    9
[ ] # Example - 18
    for i in range(1, 6):
        if(i%2 == 0):
           for j in range(2, i+i+1, 2):
               print(j, end=" ")
        else:
            for k in range(1, i+i, 2):
                print(k, end=" ")
        print()
    2 4
    1 3 5
    2 4 6 8
    1 3 5 7 9
[ ] # Example - 19
    for i in range(5, 0, -1):
        for j in range(i, 6):
            print(j, end=" ")
        for k in range(1, i):
           print(5, end=" ")
        print()
    5 5 5 5 5
    4 5 5 5 5
    3 4 5 5 5
    2 3 4 5 5
    1 2 3 4 5
```

```
# Example - 20
    k = 0
    for i in range(1, 5):
        for j in range(0, i):
            k += 1;
            print(k, end=" ")
        print()
    1
    2 3
    4 5 6
    7 8 9 10
[ ] # Example - 21
    for i in range(1, 6):
        print(i, end=" ")
        m = 4
        k = i + m
        for j in range(1, i):
           print(k, end=" ")
           m -= 1
            k = k + m
        print()
    1
    2 6
    3 7 10
    4 8 11 13
    5 9 12 14 15
[ ] # Example - 22
    for i in range(2, 11, 2):
        for j in range(1, i):
           print(j, end=" ")
        print()
    1 2 3
    1 2 3 4 5
    1 2 3 4 5 6 7
    1 2 3 4 5 6 7 8 9
[ ] # Example - 23
    for i in range(6, 1, -1):
        for j in range(1, i):
           print(j, end=" ")
        for k in range(i, 6):
           print("**", end=" ")
        for m in range(i-1, 0, -1):
           print(m, end=" ")
        print()
    1 2 3 4 5 5 4 3 2 1
    1 2 3 4 ** 4 3 2 1
    1 2 3 ** ** 3 2 1
    1 2 ** ** ** 2 1
    1 ** ** ** 1
[ ] # Example - 24
    k = 0
    for i in range(1, 6, 2):
        for j in range(5, 0, -1):
        if(j > i):
```

```
print(" ", end="")
            else:
                k += 1
                print(k, end=" ")
        print()
        1
      2 3 4
    5 6 7 8 9
[ ] # Example - 25
    for i in range(1, 6):
        for j in range(i, 6):
            if(i < 4):
               print(i, end=" ")
            else:
               print(6 - i, end=" ")
        print()
    11111
    2 2 2 2
    3 3 3
    2 2
    1
[ ] # Example - 26
    for i in range(1, 6):
        for j in range(5, 0, -1):
            if(i == j):
               print("*", end=" ")
               print(j, end=" ")
        print()
    5 4 3 2 *
    5 4 3 * 1
    5 4 * 2 1
    5 * 3 2 1
    * 4 3 2 1
[ ] # Example - 27
    for i in range(2, 7):
        for j in range(1, i):
               print(j, end=" ")
        for k in range(i-2, 0, -1):
               print(k, end=" ")
        print()
    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
[ ] # Example 28
    for i in range(10, 0, -1):
        for j in range(i, 10):
               print(j, end=" ")
        print("0", end=" ")
        for k in range(9, i-1, -1):
```

```
print(k, ena= )
        print()
    9 0 9
    8 9 0 9 8
    7890987
    678909876
    5 6 7 8 9 0 9 8 7 6 5
    4 5 6 7 8 9 0 9 8 7 6 5 4
    3 4 5 6 7 8 9 0 9 8 7 6 5 4 3
    2 3 4 5 6 7 8 9 0 9 8 7 6 5 4 3 2
    1234567890987654321
[ ] # Example - 29
    for i in range(1, 6):
        for j in range(1, 6):
            if(j <= i):
              print(j, end=" ")
            else:
              print(" ", end=" ")
        for k in range(5, 0, -1):
            if(k <= i):
              print(k, end=" ")
            else:
              print(" ", end=" ")
        print()
    1 2
                   2 1
    1 2 3
                3 2 1
    1 2 3 4 4 3 2 1
    1 2 3 4 5 5 4 3 2 1
[ ] # Example - 30
    for i in range(1, 6):
        for j in range(5, 0, -1):
            if(j <= i):
              print(j, end=" ")
               print(" ", end=" ")
        print()
           1
          2 1
        3 2 1
      4 3 2 1
    5 4 3 2 1
[] # Example - 31
    for i in range(1, 6):
        count = 1
        for j in range(0, i):
            if(count == 1):
               print(i, end=" ")
                count = 2
            else:
               print("*"+str(i), end=" ")
        print()
    for i in range(4, 0, -1):
        count = 1
        for j in range(0, i):
           if(count == 1):
             print(i, end=" ")
```

```
count = 2
            else:
                print("*"+str(i), end=" ")
        print()
    1
    2 *2
    3 *3 *3
    4 *4 *4 *4
    5 *5 *5 *5 *5
    4 *4 *4 *4
    3 *3 *3
    2 *2
    1
[ ] # Example - 32
    for i in range(2, 7):
        for j in range(1, i):
            print(8+i+j, end=" ")
        print()
    11
    12 13
    13 14 15
    14 15 16 17
    15 16 17 18 19
[ ] # Example - 33
    for i in range(2, 7):
        for j in range(1, i):
            print(i+j-2, end=" ")
        print()
    1
    2 3
    3 4 5
    4 5 6 7
    5 6 7 8 9
[ ] # Example - 34
    for i in range(1, 7):
        for j in range(0, i):
            print(i+j-1, end=" ")
        print()
    1 2
    2 3 4
    3 4 5 6
    4 5 6 7 8
    5 6 7 8 9 10
[ ] # Example - 35
    for i in range(5, 0, -1):
        for j in range(1, i):
                print(" ", end=" ")
        for k in range(5, i-1, -1):
                print(k, end=" ")
        print()
            5
```

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

```
[ ] # Example - 36
    for i in range(1, 6):
        for j in range(i, 0, -1):
            print(j, end=" ")
        for k in range(2, i+1):
            print(k, end=" ")
        print()
    1
    2 1 2
    3 2 1 2 3
    4 3 2 1 2 3 4
    5 4 3 2 1 2 3 4 5
[] # Example - 37
    for i in range(1, 6):
        for j in range(i, 6):
            print(j, end=" ")
        for k in range(i-1, 0, -1):
            print(k, end=" ")
        print()
    1 2 3 4 5
    2 3 4 5 1
    3 4 5 2 1
    4 5 3 2 1
    5 4 3 2 1
[ ] # Example - 38
    for i in range(1, 6):
        for j in range(i, 6):
            print(i % 2, end=" ")
        print()
    11111
    0000
    1 1 1
    0 0
    1
[ ] # Example - 39
    for i in range(1, 6):
        for j in range(1, 6):
            if(i == 1 \text{ or } i == 5 \text{ or } j == 1 \text{ or } j == 5):
               print("1", end=" ")
            else:
               print(" ", end=" ")
        print()
    11111
            1
    1
    1
            1
    11111
[ ] # Example - 40
    for i in range(1, 6):
        for j in range(1, 6):
```

```
II(T == I OL I == D OL ] == I OL ] == D).
               print("1", end=" ")
               print("*", end=" ")
         print()
    1 1 1 1 1
    1 * * * 1
    1 * * * 1
    1 * * * 1
    11111
[ ] # Example - 41
    for i in range(1, 6):
        for j in range(5, i, -1):
            print(" ", end="")
        for k in range(1, i+1):
           print(k, end=" ")
        print()
        1
       1 2
      1 2 3
     1 2 3 4
    1 2 3 4 5
[ ] # Example - 43
    for i in range(2, 11, 2):
        for j in range(i, 10, 2):
            print(" ", end=" ")
         for k in range(1, i):
            print(k, end=" ")
         print()
    for i in range(8, 0, -2):
         for j in range(i, 9, 2):
            print(" ", end=" ")
         for k in range(1, i):
            print(k, end=" ")
        print()
            1
          1 2 3
        1 2 3 4 5
      1 2 3 4 5 6 7
    1 2 3 4 5 6 7 8 9
      1 2 3 4 5 6 7
        1 2 3 4 5
          1 2 3
            1
[] # Example - 44
    for i in range(1, 5):
         for j in range(1, 10):
            if(i == j \text{ or } j == 5 \text{ or } i == 10-j):
               print("*", end=" ")
             else:
               print( "0", end=" ")
         print()
    * 0 0 0 * 0 0 0 *
    0 * 0 0 * 0 0 * 0
    00 * 0 * 0 * 0 0
    000 * * * 000
```

```
[] # Example - 45
    for i in range(5, 0, -1):
         for j in range(5, 1, -1):
            if(j > i):
                print(j, end=" ")
             else:
                print(i, end=" ")
         for j in range(1, 6):
             if(j > i):
                 print(j, end=" ")
             else:
                print(i, end=" ")
         print()
    5 5 5 5 5 5 5 5 5
    5 4 4 4 4 4 4 4 5
    5 4 3 3 3 3 3 4 5
    5 4 3 2 2 2 3 4 5
    5 4 3 2 1 2 3 4 5
[ ] # Example - 46
     for i in range(5, 0, -1):
         for j in range(5, 1, -1):
             if(j > i):
                print(j, end=" ")
             else:
                print(i, end=" ")
         for j in range(1, 6):
             if(j > i):
                print(j, end=" ")
             else:
                print(i, end=" ")
         print()
    for i in range(2, 6):
         for j in range(5, 1, -1):
             if(j > i):
                 print(j, end=" ")
             else:
                print(i, end=" ")
         for j in range(1, 6):
             if(j > i):
                print(j, end=" ")
             else:
                print(i, end=" ")
         print()
    5 5 5 5 5 5 5 5 5
    5 4 4 4 4 4 4 4 5
    5 4 3 3 3 3 3 4 5
    5 4 3 2 2 2 3 4 5
    5 4 3 2 1 2 3 4 5
    5 4 3 2 2 2 3 4 5
    5 4 3 3 3 3 3 4 5
    5 4 4 4 4 4 4 4 5
    5 5 5 5 5 5 5 5 5
   # Example - 47
     for i in range(1, 6):
         if(i == 1):
           res = i
         else:
          res = res * 11
```

```
print(res, end="")
        print()
    1
    11
    121
    1331
    14641
[ ] # Example - 48
    for i in range(1, 11):
        for j in range(1, i+1):
            print(i*j, end=" ")
        print()
    1
    2 4
    3 6 9
    4 8 12 16
    5 10 15 20 25
    6 12 18 24 30 36
    7 14 21 28 35 42 49
    8 16 24 32 40 48 56 64
    9 18 27 36 45 54 63 72 81
    10 20 30 40 50 60 70 80 90 100
[ ] # Example - 49
    for i in range(1, 6):
        for j in range(i, 1, -1):
           print(j, end=" ")
        for k in range(1, 7-i):
            print(k, end=" ")
        print()
    1 2 3 4 5
    2 1 2 3 4
    3 2 1 2 3
    4 3 2 1 2
    5 4 3 2 1
[ ] # Example - 50
    k = 1
    m = 1
    for i in range(1, 6):
        m = k + i - 1
        for j in range(1, i+1):
            if(i % 2 == 1):
                print(k, end=" ")
            else:
                print(m, end=" ")
                m -= 1
             k += 1
        print()
    1
    3 2
    4 5 6
    10 9 8 7
    11 12 13 14 15
[ ] # Example - 51
    for i in range(1, 6):
        m = i
```

```
for j in range(1, i+1):
            print(m, end=" ")
            m += 1
        m = m - 2
        for k in range(1, i):
            print(m, end=" ")
            m -= 1
        print()
    2 3 2
    3 4 5 4 3
    4 5 6 7 6 5 4
    5 6 7 8 9 8 7 6 5
[ ] # Example - 52
    for i in range(1, 6):
        for j in range(1, 6):
            if(i == j):
               print(i, end=" ")
            else:
               print(" ", end=" ")
        for k in range(4, 0, -1):
            if(i == k):
               print(i, end=" ")
            else:
               print(" ", end=" ")
        print()
      2
                 2
        3
               3
          4 4
            5
[ ] # Example - 53
    for i in range(1, 6):
        for j in range(1, 6):
            if(i == j):
               print(i, end=" ")
            else:
               print(" ", end=" ")
        for k in range(4, 0, -1):
            if(i == k):
               print(i, end=" ")
               print(" ", end=" ")
        print()
    for i in range(4, 0, -1):
        for j in range(1, 5):
            if(i == j):
               print(i, end=" ")
            else:
               print(" ", end=" ")
        for k in range(5, 0, -1):
            if(i == k):
                print(i, end=" ")
            else:
                print(" ", end=" ")
        print()
```

.

```
2
[ ] # Example - 54
    for i in range(1, 6):
        k = 4
        res = i
        for j in range(i, i+i):
            if(i == j):
                print(j, end=" ")
            else:
                res = res + k
                print(res, end=" ")
                k -= 1
        print()
    2 6
    3 7 10
    4 8 11 13
    5 9 12 14 15
[ ] # Example - 55
    for i in range(1, 6):
        for j in range(5, i, -1):
            print(" ", end=" ")
        for k in range(1, 6):
            if(k <= i):
                print(k, end=" ")
        for m in range(i-1, 0, -1):
            print(m, end=" ")
        print()
          1 2 1
        1 2 3 2 1
      1 2 3 4 3 2 1
    1 2 3 4 5 4 3 2 1
[ ] # Example - 56
    for i in range(1, 6):
        for j in range(5, 0, -1):
            if(i == j):
                print(j, end="")
            else:
                print("", end=" ")
        for k in range(2, 6):
            if(i == k):
                print(k, end="")
            else:
                print("", end=" ")
        print()
        1
       2 2
```

```
[ ] # Example - 57
     for i in range(1, 6):
         for j in range(5, 0, -1):
             if(i == j):
                 print(j, end="")
                print("", end=" ")
         for k in range(2, 6):
             if(i == k):
                print(k, end="")
                print("", end=" ")
         print()
     for i in range(4, 0, -1):
         for j in range(5, 0, -1):
             if(i == j):
                print(j, end="")
                print("", end=" ")
         for k in range(2, 5):
             if(i == k):
                 print(k, end="")
                print("", end=" ")
         print()
        1
       2 2
      3 3
      4
           4
       3 3
        2 2
        1
[ ] # Example - 58
     for row in range(1,6):
        for i in range(0, row):
             print("1", end=" ")
         print("*","#")
     1 * #
    1 1 * #
    111*#
    1111*#
     11111*#
[ ] # Example - 59
     for row in range(1,6):
        for i in range(0, row):
             print("5",end=" ")
         print( )
     5
     5 5
     5 5 5
     5 5 5 5
     5 5 5 5 5
[ ] # Fvample - 60
```

```
for row in range(0,5):
       for i in range(0,5):
         print(row,end=" ")
       print()
    00000
    11111
    2 2 2 2 2
    3 3 3 3 3
    4 4 4 4 4
Star - Pattern
[ ] # Example - 1
   for i in range(0, 5):
       for j in range(0, i+1):
         print("*",end=" ")
       print()
# Example - 2
    for i in range(5, 0, -1):
       for j in range(i, 0, -1):
         print("*",end=" ")
       print()
[ ] # Example - 3
    for i in range(5, 0, -1):
       for j in range(i, 1, -1):
         print(" ",end=" ")
       for j in range(i, 6):
          print("*",end=" ")
        print()
# Example - 4
    for i in range(5, 0, -1):
       for j in range(i, 5, 1):
          print(" ",end=" ")
       for j in range(0, i):
          print("*",end=" ")
        print()
    * * * * *
```

```
# Example - 5
    for i in range(5, 0, -1):
        for j in range(i, 1, -1):
            print(" ",end=" ")
        for k in range(i, 6):
           print("*",end=" ")
        for m in range(i, 5, 1):
            print("*",end=" ")
        print()
[ ] # Example - 6
    for i in range(5, 0, -1):
        for j in range(i, 5, 1):
            print(" ",end=" ")
        for k in range(0, i):
           print("*",end=" ")
        for m in range(1, i):
            print("*",end=" ")
        print()
[] # Example - 7
    for i in range(5, 0, -1):
        for j in range(0, 6):
            if(i == j):
               print("*",end=" ")
            else:
               print(" ",end=" ")
        for j in range(4, 0, -1):
            if(i == j):
               print("*",end=" ")
            else:
               print(" ",end=" ")
        print()
[ ] # Example - 8
    for i in range(0, 10):
        for j in range(0, 10):
            if(i == j):
               print("*",end="")
            else:
```

```
for j in range(8, -1, -1):
            if(i == j):
               print("*",end="")
            else:
               print(" ",end="")
        print()
[ ] # Example - 9
    for i in range(5, 0, -1):
        for j in range(0, 5):
            if(i == j):
               print("*",end="")
             else:
               print(" ",end="")
        for j in range(3, 0, -1):
            if(i == j):
               print("*",end="")
               print(" ",end="")
        print()
    for i in range(0, 5):
        for j in range(0, 5):
            if(i == j):
               print("*",end="")
            else:
               print(" ",end="")
        for j in range(3, -1, -1):
            if(i == j):
               print("*",end="")
               print(" ",end="")
        print()
[ ] # Example - 10
    for i in range(5, 0, -1):
        for j in range(i, 1, -1):
            print(" ",end="")
        for k in range(i, 6):
            print("*",end="")
        for m in range(i, 5, 1):
            print("*",end="")
        print()
```

print(" ",end="")

```
for i in range(4, 0, -1):
        for j in range(i, 5, 1):
            print(" ",end="")
        for k in range(0, i):
           print("*",end="")
        for m in range(1, i):
           print("*",end="")
        print()
[ ] # Example - 11
    for i in range(5, 0, -1):
        for j in range(i, 0, -1):
            print("*",end="")
        for k in range(i, 5):
           print(" ",end="")
        for m in range(i, 5, 1):
           print(" ",end="")
        for n in range(0, i):
            print("*",end="")
        print()
    for i in range(1, 5):
        for j in range(0, i+1):
            print("*",end="")
        for k in range(i, 4):
           print(" ",end="")
        for m in range(i, 4):
            print(" ",end="")
        for n in range(-1, i):
            print("*",end="")
        print()
    ******
```

## **Alphabets**

```
[] # Example - 1
  for i in range(1, 6):
    for j in range(65, 65+i):
        a = chr(j)
        print(a, end=" ")
    print()
```

```
A
    АВ
    ABC
    ABCD
    ABCDE
[] # Example - 2
    for i in range(1, 6):
       for j in range(69, 69-i, -1):
          a = chr(j)
          print(a, end=" ")
        print()
    E D
    EDC
    EDCB
    EDCBA
[ ] # Example - 3
    for i in range(0, 5):
       for j in range(69 - i, 70):
           a = chr(j)
           print(a, end=" ")
        print()
    E
    DE
    CDE
    BCDE
    ABCDE
[ ] # Example - 4
   for i in range(0, 5):
       for j in range(65 + i, 64, -1):
           a = chr(j)
           print(a, end=" ")
        print()
    ВА
    CBA
    DCBA
    EDCBA
[ ] # Example - 5
    for i in range(5, 0, -1):
       for j in range(65, 65+i):
           a = chr(j)
           print(a, end=" ")
        print()
    ABCDE
    ABCD
    ABC
    АВ
    A
[ ] # Example - 6
    for i in range(0, 5):
       for j in range(65+i, 70):
           a = chr(j)
           print(a, end=" ")
        nnint()
```

```
hi Tile()
    ABCDE
    BCDE
    CDE
    DE
    E
[ ] # Example - 7
    for i in range(0, 5):
        for j in range(69-i, 64, -1):
           a = chr(j)
           print(a, end=" ")
        print()
    EDCBA
    DCBA
    CBA
    ВА
    A
[ ] # Example - 8
    for i in range(0, 5):
        for j in range(69, 64+i, -1):
           a = chr(j)
           print(a, end=" ")
        print()
    EDCBA
    EDCB
    E D C
    E D
    E
[ ] # Example - 9
    for i in range(65, 70):
        for j in range(64, i):
           a = chr(i)
           print(a, end=" ")
        print()
    A
    ВВ
    CCC
    DDDD
    EEEEE
[ ] # Example - 10
    for i in range(70, 64, -1):
        for j in range(70, i, -1):
           a = chr(i)
           print(a, end=" ")
        print()
    E
    DD
    CCC
    BBBB
    AAAAA
[ ] # Example - 11
```

```
for i in range(69, 64, -1):
        for j in range(64, i):
           a = chr(i)
           print(a, end=" ")
        print()
    EEEEE
    DDDD
    CCC
    ВВ
[ ] # Example - 12
    for i in range(65, 70):
        for j in range(i, 70):
           a = chr(i)
           print(a, end=" ")
        print()
    AAAAA
    BBBB
    CCC
    D D
    E
[ ] # Example - 13
    k = 64;
    for i in range(69, 64, -1):
        for j in range(i, 70):
           k += 1
           a = chr(k)
           print(a , end=" ")
        print()
    A
    BC
    DEF
    GHIJ
    KLMNO
[ ] # Example - 14
    for i in range(66, 76, 2):
        for j in range(65, i):
           a = chr(j)
           print(a , end=" ")
        print()
    A
    ABC
    ABCDE
    ABCDEFG
    ABCDEFGHI
[ ] # Example - 15
    for i in range(5, 0, -1):
        for j in range(65, 65+i):
           a = chr(j)
           print(a, end=" ")
        for k in range(5, i, -1):
           print("*", end=" ")
        for m in range(5, i, -1):
           print("*", end=" ")
        for n in range(64+i, 64, -1):
```

```
b = chr(n)
              print(b, end=" ")
           print()
       ABCDEEDCBA
       ABCD**DCBA
       A B C * * * * C B A
       A B * * * * * B A
       A * * * * * * * A
  [ ] # Example - 16
       k = 64
       for i in range(0, 5, 2):
           for j in range(4, -1, -1):
              if(j > i):
                  print(" ", end="")
              else:
                  k += 1
                  a = chr(k)
                  print(a, end=" ")
           print()
         BCD
       EFGHI
  [ ] # Example 17
       for i in range(65, 70):
           for j in range(69, 64, -1):
              if(j == i):
                  print("*", end=" ")
              else:
                  a = chr(j)
                  print(a , end=" ")
           print()
       EDCB*
       EDC * A
       ED*BA
       E * C B A
       * D C B A
   [ ] # Example - 18
       for i in range(1, 6):
           for j in range(65, 65+i):
              a = chr(j)
              print(a, end=" ")
           for k in range(63+i, 64, -1):
              a = chr(k)
              print(a, end=" ")
           print()
       ABA
       ABCBA
       ABCDCBA
       ABCDEDCBA
✓ [5] # Example - 19
       for i in range(65, 70):
           for j in range(65, 70):
              25/2 / 21.
```

```
TT(] <= 1):
                  a = chr(j)
                  print(a, end=" ")
               else:
                  print(" ", end=" ")
           for k in range(69, 64, -1):
               if(k <= i):
                  b = chr(k)
                  print(b, end=" ")
               else:
                  print(" ", end=" ")
           print()
       A
       AB
                      BA
       ABC
                  CBA
       ABCD DCBA
       ABCDEEDCBA
✓ [3] # Example - 20
       for i in range(65, 70):
           for j in range(69, 64, -1):
               if(j <= i):
                  a = chr(j)
                  print(a, end=" ")
               else:
                  print(" ", end=" ")
           print()
              A
             ВА
          CBA
         DCBA
       EDCBA
✓ [7] # Example - 21
       for i in range(65, 70):
           count = 1
           for j in range(64, i):
              a = chr(i)
              if(count == 1):
                  print(a, end=" ")
                  count = 2
               else:
                  print("*"+a, end=" ")
           print()
       for i in range(68, 64, -1):
           count = 1
           for j in range(64, i):
              if(count == 1):
                  a = chr(i)
                  print(a, end=" ")
                  count = 2
                  print("*"+a, end=" ")
           print()
       B *B
       C *C *C
       D *D *D *D
       E *E *E *E *E
       D *D *D *D
       C *C *C
```

```
B *B
```

```
√ [8] # Example - 22

       k = 64
       for i in range(65, 70):
           for j in range(69, 64, -1):
               if(j <= i):
                  k += 1;
                   a = chr(k)
                   print(a, end=" ")
               else:
                   print(" ", end=" ")
           print()
               Α
             ВС
           DEF
         GHIJ
       KLMNO
✓ [9] # Example - 23
       for i in range(69, 64, -1):
           k = 70;
           for j in range(65, 70):
               if(j >= i):
                   k -= 1
                   a = chr(k)
                   print(a, end=" ")
               else:
                  print(" ", end=" ")
           print()
              E
            E D
           EDC
         EDCB
       EDCBA

✓ [11] # Example - 24
       for i in range(65, 70):
           for j in range(i, 64, -1):
               a = chr(j)
               print(a, end=" ")
           for k in range(66,i+1):
               b = chr(k)
               print(b, end=" ")
           print()
       BAB
       CBABC
       DCBABCD
       EDCBABCDE

✓ [12] # Example - 25
       k = 64
       for i in range(70, 65, -1):
           for j in range(65, i):
              k += 1;
               a = chr(k)
               print(a, end=" ")
           print()
```

```
ABCDE
       FGHI
       J K L
       MN
       0
 [13] # Example - 26
       for i in range(65, 70):
          for j in range(i, 70):
              a = chr(j)
              print(a, end=" ")
          for k in range(i-1, 64, -1):
              b = chr(k)
              print(b, end=" ")
          print()
       ABCDE
       BCDEA
       CDEBA
       DECBA
       EDCBA

✓ [16] # Example - 27
       for i in range(65, 70):
          for j in range(70, i, -1):
             print(" ", end="")
          for k in range(65, i+1):
              a = chr(k)
              print(a, end=" ")
          print()
           A
          AB
         ABC
        ABCD
        ABCDE

✓ [17] # Example - 28

       k = 70
       for i in range(69, 64, -1):
          for j in range(k-1, 65, -1):
              if(j > i):
                 a = chr(j)
              else:
                 a = chr(i)
              print(a, end=" ")
          for j in range(65, k):
              if(j > i):
                 b = chr(j)
              else:
                  b = chr(i)
              print(b, end=" ")
          print()
       EEEEEEEE
       EDDDDDDDE
       EDCCCCCDE
       EDCBBBCDE
       EDCBABCDE
```

# Example - 29

```
K = /0
       for i in range(69, 64, -1):
           for j in range(k-1, 65, -1):
              if(j > i):
                 a = chr(j)
              else:
                 a = chr(i)
              print(a, end=" ")
           for j in range(65, k):
              if(j > i):
                  b = chr(j)
              else:
                  b = chr(i)
              print(b, end=" ")
           print()
       for i in range(66, k):
           for j in range(k-1, 65, -1):
              if(j > i):
                 a = chr(j)
              else:
                  a = chr(i)
              print(a, end=" ")
           for j in range(65, k):
              if(j > i):
                  b = chr(j)
              else:
                  b = chr(i)
              print(b, end=" ")
           print()
       EEEEEEEE
       EDDDDDDDE
       EDCCCCCDE
       EDCBBBCDE
       EDCBABCDE
       EDCBBBCDE
       EDCCCCCDE
       EDDDDDDDE
       EEEEEEEEE
✓ [19] # Example - 30
       init = 64;
       for i in range(70, 65, -1):
           init += 1;
           for j in range(init, 65, -1):
              a = chr(j)
              print(a, end=" ")
           for k in range(65, i):
              a = chr(k)
              print(a, end=" ")
           print()
       ABCDE
       BABCD
       CBABC
       DCBAB
       EDCBA
✓ [20] # Example - 31
       for i in range(65, 70):
           for j in range(65, 70):
              if(i == j):
                  a = chr(i)
                  print(a, end=" ")
```

```
else:
                 print(" ", end=" ")
         for k in range(68, 64, -1):
             if(i == k):
                 a = chr(i)
                 print(a, end=" ")
             else:
                 print(" ", end=" ")
         print()
    АВ
                 C
           D D
            E
[32] # Example - 32
     for i in range(65, 70):
         for j in range(69, 64, -1):
             if(i == j):
                 a = chr(j)
                 print(a, end=" ")
             else:
                 print("", end=" ")
         for k in range(66, 70):
             if(i == k):
                 a = chr(k)
                 print(a, end=" ")
                  print("", end=" ")
         print()
        C
     E
[30] # Example - 33
     for i in range(65, 70):
         for j in range(69, 64, -1):
             if(i == j):
                 a = chr(j)
                 print(a, end=" ")
             else:
                 print("", end=" ")
         for k in range(66, 70):
             if(i == k):
                 a = chr(k)
                 print(a, end=" ")
             else:
                 print("", end=" ")
         print()
     for i in range(68, 64, -1):
         for j in range(69, 64, -1):
             if(i == j):
                 a = chr(j)
                 print(a, end=" ")
             else:
                 print("", end=" ")
         for k in range(66, 69):
            if(i == k):
                 a = chr(k)
                 print(a, end=" ")
```

```
else:
           print("", end=" ")
    print()
     В В
  D
             D
          C
   C
      В В
        A
                                                                           ↑ ↓ e 目 $ 紀 i :
# Example - 34
 for i in range(65, 70):
    for j in range(i+1, 70):
       print(" ", end=" ")
    for k in range(65, i+1):
       a = chr(k)
       print(a, end=" ")
    for m in range(i-1, 64, -1):
       b = chr(m)
       print(b, end=" ")
```

A B A A B C B A A B C D C B A A B C D E D C B A

print()