



Pattern Programs

Pattern-1:

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

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

Pattern-2:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+1):
4)         print(i,end=" ")
5)     print()
```

Pattern-3:

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



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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+1):
4)         print(j,end=" ")
5)     print()
```

Pattern-4:

AAAAAAAAAAAA
BBBBBBBBBBBB
CCCCCCCCCCCC
DDDDDDDDDDDD
EEEEEEEEEEEE
FFFFFFFFFFFF
GGGGGGGGGGGG
HHHHHHHHHHHH
IIIIIIIIII
JJJJJJJJJJ

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+1):
4)         print(chr(64+i),end=" ")
5)     print()
```

Pattern-5:

ABCDEFGH IJ
ABCDEFGH IJ
ABCDEFGH IJ
ABCDEFGH IJ
ABCDEFGH IJ
ABCDEFGH IJ
ABCDEFGH IJ
ABCDEFGH IJ
ABCDEFGH IJ
ABCDEFGH IJ



```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+1):
4)         print(chr(64+j),end=" ")
5)     print()
```

Pattern-6:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+1):
4)         print(n+1-i,end=" ")
5)     print()
```

Pattern-6:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+1):
4)         print(n+1-j,end=" ")
5)     print()
```



Pattern-7:

```
J J J J J J J J J J
I I I I I I I I I I
H H H H H H H H H H
G G G G G G G G G G
F F F F F F F F F F
E E E E E E E E E E
D D D D D D D D D D
C C C C C C C C C C
B B B B B B B B B B
A A A A A A A A A A
```

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+1):
4)         print(chr(65+n-i),end=" ")
5)     print()
```

Pattern-8:

```
J I H G F E D C B A
J I H G F E D C B A
J I H G F E D C B A
J I H G F E D C B A
J I H G F E D C B A
J I H G F E D C B A
J I H G F E D C B A
J I H G F E D C B A
J I H G F E D C B A
J I H G F E D C B A
J I H G F E D C B A
```

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+1):
4)         print(chr(65+n-j),end=" ")
5)     print()
```

Pattern-9:

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



Code - 1:

```
1) n=int(input("Enter the number of rows:"))  
2) for i in range(1,n+1):  
3)     for j in range(1,i+1):  
4)         print("*",end=" ")  
5)     print()
```

Code - 2:

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

Pattern-10:

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

```
1) n=int(input("Enter the number of rows: "))  
2) for i in range(1,n+1):  
3)     for j in range(1,i+1):  
4)         print(i,end=" ")  
5)     print()
```

Pattern-11:

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



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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,i+1):
4)         print(j,end=" ")
5)     print()
```

Pattern-12:

A
B B
C C C
D D D D
E E E E E
F F F F F F
G G G G G G G
H H H H H H H H
I I I I I I I I I
J J J J J J J J J J

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,i+1):
4)         print(chr(64+i),end=" ")
5)     print()
```

Pattern-13:

A
A B
A B C
A B C D
A B C D E
A B C D E F
A B C D E F G
A B C D E F G H
A B C D E F G H I
A B C D E F G H I J

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,i+1):
4)         print(chr(64+j),end=" ")
5)     print()
```



- ❖ Squares
- ❖ Right Angled Triangle
- ❖ Reverse of Right Angled Triangle

Pattern-14:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+2-i):
4)         print("*",end=" ")
5)     print()
```

Pattern-15:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+2-i):
4)         print(i,end=" ")
5)     print()
```



Pattern-16:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+2-i):
4)         print(j,end=" ")
5)     print()
```

Pattern-17:

```
A A A A A A A A A A
B B B B B B B B
C C C C C C C C
D D D D D D D
E E E E E
F F F F F
G G G G
H H H
I I
J
```

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+2-i):
4)         print(chr(64+i),end=" ")
5)     print()
```

Pattern-18:

```
A B C D E F G H I J
A B C D E F G H I
A B C D E F G H
A B C D E F G
A B C D E F
A B C D E
A B C D
```




A B C

A B

A

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+2-i):
4)         print(chr(64+j),end=" ")
5)     print()
```

Pattern-19:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+2-i):
4)         print(n+1-i,end=" ")
5)     print()
```

Pattern-20:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+2-i):
4)         print(n+1-j,end=" ")
5)     print()
```



Pattern-21:

```
JJJJJJJJJJ
IIIIIIIII
HHHHHHHHH
GGGGGGGG
FFFFFFF
EEEEEE
DDDD
CCC
BB
A
```

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+2-i):
4)         print(chr(65+n-i),end=" ")
5)     print()
```

Pattern-22:

```
JIHGFEDCBA
JIHGFEDCB
JIHGFEDC
JIHGFED
JIHGFE
JIHGF
JIHG
JIH
JI
J
```

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     for j in range(1,n+2-i):
4)         print(chr(65+n-j),end=" ")
5)     print()
```

Pattern-23:

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




```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i), "*" * i, end=" ")
4)     print()
```

Pattern-24:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i), end="")
4)     for j in range(1,i+1):
5)         print("*", end=" ")
6)     print()
```

Pattern-25:

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



9 9 9 9 9 9 9 9

10 10 10 10 10 10 10 10 10 10

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i),(str(i)+" ")*i)
4)     print()
```

Pattern-26:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i),end="")
4)     for j in range(1,i+1):
5)         print(j,end=" ")
6)     print()
```

Pattern-27:

```
A
B B
C C C
D D D D
E E E E E
F F F F F F
G G G G G G G
H H H H H H H H
```



```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i),(chr(64+i)+" ")*i)
4)     print()
```

Pattern-28:

```

  A
 A B
A B C
A B C D
A B C D E
A B C D E F
A B C D E F G
A B C D E F G H
A B C D E F G H I
A B C D E F G H I J
```

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i),end="")
4)     for j in range(1,i+1):
5)         print(chr(64+j),end=" ")
6)     print()
```

Pattern-29:

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

```

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

Pattern-30:

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



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

Pattern-31:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(i-1),end="")
4)     for j in range(1,n+2-i):
5)         print(j,end=" ")
6)     print()
```

Pattern-32:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(i-1),(str(chr(65+n-i))+" ")*(n+1-i))
```

Pattern-33:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(i-1),end="")
4)     for j in range(65,66+n-i):
5)         print(chr(j),end=" ")
6)     print()
```



Pattern-34:

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

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

Pattern-35:

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

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

Pattern-36:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i),(str(chr(64+i)+" ")*(2*i-1))
```

Pattern-37:

```
A
C C C
E E E E
G G G G G G
I I I I I I I
```



```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i),(str(chr(64+2*i-1)+" "))* (2*i-1))
```

Pattern-38:

```
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) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i),end="")
4)     for j in range(1,2*i):
5)         print(j,end=" ")
6)     print()
```

Pattern-39:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i),end="")
4)     for j in range(2*i-1,0,-1):
5)         print(j,end=" ")
6)     print()
```

Pattern-40:

```
A
A B C
A B C D E
A B C D E F G
A B C D E F G H I
```

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i),end="")
4)     for j in range(65,65+2*i-1):
```




```
5) print(chr(j),end=" ")
6) print()
```

Pattern-41:

```
A
C B A
E D C B A
G F E D C B A
I H G F E D C B A
```

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i),end="")
4)     for j in range(65+2*i-2,64,-1):
5)         print(chr(j),end=" ")
6)     print()
```

Pattern-42:

```
0
1 0 1
2 1 0 1 2
3 2 1 0 1 2 3
4 3 2 1 0 1 2 3 4
```

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i),end="")
4)     for j in range(1,i):
5)         print(i-j,end=" ")
6)     for k in range(0,i):
7)         print(k,end=" ")
8)     print()
```

Pattern-43:

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

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



```
4) for j in range(1,i):
5)     print(chr(i-j+65),end=" ")
6) for k in range(0,i):
7)     print(chr(k+65),end=" ")
8) print()
```

Pattern-44:

```
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
```

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i),end="")
4)     for j in range(1,i+1):
5)         print(j,end=" ")
6)     for k in range(i-1,0,-1):
7)         print(k,end=" ")
8)     print()
```

Pattern-45:

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

```
1) n=int(input("Enter the number of rows: "))
2) for i in range(1,n+1):
3)     print(" "*(n-i),end="")
4)     for j in range(1,i+1):
5)         print(chr(64+j),end=" ")
6)     for k in range(1,i):
7)         print(chr(64+k),end=" ")
8)     print()
```

Pattern-46:

```
1) n=int(input("Enter a number:"))
2) for i in range(1,n+1):
3)     print(" "*(n-i),end="")
4)     for j in range(1,i+1):
```



```
5) print(n+1-j,end=" ")
6) print()
```

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

Pattern-47:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(1,num+2-i):
5)         print("*",end=" ")
6)     for k in range(1,num+1-i):
7)         print("*",end=" ")
8)     print()
```

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

Pattern-48:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(0,num+1-i):
5)         print(num+1-i,end=" ")
6)     for k in range(1,num+1-i):
7)         print(num+1-i,end=" ")
8)     print()
```

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



Pattern-49:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print("  "*(i-1),end="")
4)     for j in range(0,num+1-i):
5)         print(2*num+1-2*i,end=" ")
6)     for k in range(1,num+1-i):
7)         print(2*num+1-2*i,end=" ")
8)     print()
```

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

Pattern-50:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print("  "*(i-1),end="")
4)     for j in range(1,num+2-i):
5)         print(j,end=" ")
6)     for k in range(2,num+2-i):
7)         print(num+k-i,end=" ")
8)     print()
```

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

Pattern-51:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print("  "*(i-1),end="")
4)     for j in range(1,num+2-i):
5)         print(chr(65+num-i),end=" ")
6)     for k in range(2,num+2-i):
7)         print(chr(65+num-i),end=" ")
8)     print()
```



```
EEEEEEEE
DDDDDDD
CCCCC
BBB
A
```

Pattern-52:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(1,num+2-i):
5)         print(chr(65+2*num-2*i),end=" ")
6)     for k in range(2,num+2-i):
7)         print(chr(65+2*num-2*i),end=" ")
8)     print()
```

```
IIIIIIII
G G G G G G G
E E E E E
C C C
A
```

Pattern-53:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(1,num+2-i):
5)         print(chr(64+j),end=" ")
6)     for k in range(2,num+2-i):
7)         print(chr(68+k-i),end=" ")
8)     print()
```

```
ABCDEFG
ABCDE
ABC
A
```

Pattern-54:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(num-i),end="")
4)     for j in range(1,i+1):
5)         print(j,end=" ")
```



```
6) print()
7) for k in range(1,num):
8) print(" "*k,end="")
9) for l in range(1,num+1-k):
10) print(l,end=" ")
11) print()
```

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

Pattern-55:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3) print(" "*(num-i),end="")
4) for j in range(1,i+1):
5) print("*",end=" ")
6) print()
7) for k in range(1,num):
8) print(" "*k,end="")
9) for l in range(1,num+1-k):
10) print("*",end=" ")
11) print()
```

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

Pattern-56:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3) print(" "*(num-i),end="")
4) for j in range(1,i+1):
```



```
5) print(num-j,end=" ")
6) print()
7) for k in range(1,num):
8) print(" "*k,end="")
9) for l in range(1,num+1-k):
10) print(num-l,end=" ")
11) print()
```

```
4
4 3
4 3 2
4 3 2 1
4 3 2 1 0
4 3 2 1
4 3 2
4 3
4
```

Pattern-57:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3) print(" "*(num-i),end="")
4) for j in range(0,i):
5) print(num+j-i,end=" ")
6) print()
7) for k in range(1,num):
8) print(" "*k,end="")
9) for l in range(1,num+1-k):
10) print(l+k-1,end=" ")
11) print()
```

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

Pattern-58:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3) print(" "*(num-i),end="")
4) for j in range(0,i):
5) print(chr(65+num+j-i),end=" ")
```



```
6) print()
7) for k in range(1,num):
8) print(" "*k,end="")
9) for l in range(0,num-k):
10) print(chr(65+k+l),end=" ")
11) print()
```

```
    E
   DE
  CDE
 BCDE
ABCDE
 BCDE
  CDE
   DE
    E
```

Pattern-59:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     for j in range(1,i+1):
4)         print("*",end=" ")
5)     print()
6) for a in range(1,num+1):
7)     for k in range(1,num+1-a):
8)         print("*",end=" ")
9)     print()
```

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

Pattern-60:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     for j in range(1,i+1):
4)         print(num-j,end=" ")
5)     print()
6) for a in range(1,num+1):
7)     for k in range(1,num+1-a):
```




```
8) print(num-k,end=" ")
9) print()
```

```
4
4 3
4 3 2
4 3 2 1
4 3 2 1 0
4 3 2 1
4 3 2
4 3
4
```

Pattern-61:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     for j in range(1,i+1):
4)         print(num-i+j-1,end=" ")
5)     print()
6) for a in range(1,num+1):
7)     for k in range(0,num-a):
8)         print(k+a,end=" ")
9)     print()
```

```
4
3 4
2 3 4
1 2 3 4
0 1 2 3 4
1 2 3 4
2 3 4
3 4
4
```

Pattern-62:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     for j in range(1,i+1):
4)         print(chr(65+num-i),end=" ")
5)     print()
6) for a in range(1,num+1):
7)     for k in range(0,num-a):
8)         print(chr(65+a),end=" ")
9)     print()
```



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

Pattern-63:

```
1) for i in range(1,num+1):
2)     for j in range(1,i+1):
3)         print(chr(65+num-j),end=" ")
4)     print()
5) for a in range(1,num+1):
6)     for k in range(num-a,0,-1):
7)         print(chr(64+k+a),end=" ")
8)     print()
9) num=int(input("Enter a number:"))
```

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

Pattern-64:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     for j in range(1,i+1):
4)         print(chr(64+num-i+j),end=" ")
5)     print()
6) for a in range(1,num+1):
7)     for k in range(1,num-a+1):
8)         print(chr(64+k+a),end=" ")
9)     print()
```



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

Pattern-65:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(num-i),end="")
4)     for j in range(1,i+1):
5)         print("*",end=" ")
6)     print()
```

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

Pattern-66:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(num-i),end="")
4)     for j in range(1,i+1):
5)         print(i,end=" ")
6)     print()
```

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

Pattern-67:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(num-i),end="")
```



```
4) for j in range(1,1+i):
5)     print(j,end=" ")
6) print()
```

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

Pattern-68:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(num-i),end="")
4)     for j in range(1,1+i):
5)         print(chr(64+i),end=" ")
6)     print()
```

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

Pattern-69:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(num-i),end="")
4)     for j in range(1,1+i):
5)         print(chr(64+j),end=" ")
6)     print()
```

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

Pattern-70:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(1,num+2-i):
```



```
5) print("*",end=" ")
6) print()
```

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

Pattern-71:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(1,num+2-i):
5)         print(num-i+1,end=" ")
6)     print()
```

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

Pattern-72:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(1,num+2-i):
5)         print(num+2-i-j,end=" ")
6)     print()
```

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

Pattern-73:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(1,num+2-i):
5)         print(chr(65+num-i),end=" ")
6)     print()
```



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

Pattern-74:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(1,num+2-i):
5)         print(chr(65+num+1-i-j),end=" ")
6)     print()
```

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

Pattern-75:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(1,num+2-i):
5)         print(chr(64+j),end=" ")
6)     print()
```

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

Pattern-76:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(num-i),end="")
4)     for j in range(1,i+1):
5)         print("*",end=" ")
6)     print()
7)     for p in range(1,num):
8)         print(" "*p,end="")
```



```
9) for q in range(1,num+1-p):
10) print("*",end=" ")
11) print()
```

```

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

Pattern-77:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3) print(" "*(num-i),end="")
4) for j in range(1,i+1):
5) print(i,end=" ")
6) print()
7) for p in range(1,num):
8) print(" "*(num-p),end="")
9) for q in range(1,num+1-p):
10) print(num-p,end=" ")
11) 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
```

Pattern-78:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3) print(" "*(num-i),end="")
4) for j in range(1,i+1):
5) print(j,end=" ")
6) print()
7) for p in range(1,num):
```



```
8) print(" "*p,end="")
9) for q in range(1,num+1-p):
10) print(q+p,end=" ")
11) print()
```

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

Pattern-79:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3) print(" "*(num-i),end="")
4) for j in range(1,i+1):
5) print(j,end=" ")
6) print()
7) for p in range(1,num):
8) print(" "*p,end="")
9) for q in range(1,num+1-p):
10) print(q,end=" ")
11) print()
```

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

Pattern-80:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3) print(" "*(num-i),end="")
4) for j in range(1,i+1):
5) print(chr(64+i),end=" ")
6) print()
```




```
7) for p in range(1,num):
8)   print(" "*p,end="")
9)   for q in range(1,num+1-p):
10)    print(chr(64+num-p),end=" ")
11)   print()
```

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

Pattern-81:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)   print(" "*(num-i),end="")
4)   for j in range(1,i+1):
5)     print(chr(64+j),end=" ")
6)   print()
7) for p in range(1,num):
8)   print(" "*p,end="")
9)   for q in range(1,num+1-p):
10)    print(chr(64+q+p),end=" ")
11)   print()
```

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

Pattern-82:

```
1) n=int(input("Enter a number:"))
2) for i in range(1,n+1):
3)   print(" "*(n-i),end="")
4)   for j in range(1,i+1):
5)     print(n-i+j,end=" ")
```



```
6) for k in range(2,i+1):
7)     print(n+1-k,end=" ")
8)     print()
9) for i in range(1,n+1):
10)    print("  "*i,end="")
11)    for j in range(1+i,n+1):
12)        print(j,end=" ")
13)    for k in range(2,n+1-i):
14)        print(n+1-k,end=" ")
15)    print()
```

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

Pattern-83:

```
1) while True:
2)     n=int(input("Enter a number:"))
3)     for i in range(1,n+1):
4)         print("  "*(n-i),end="")
5)         for j in range(1,i+1):
6)             print(n+1-j,end=" ")
7)         for k in range(2,i+1):
8)             print(n-i+k,end=" ")
9)         print()
10)    for i in range(1,n+1):
11)        print("  "*i,end="")
12)        for j in range(1,n+1-i):
13)            print(n+1-j,end=" ")
14)            for k in range(2,n+1-i):
15)                print(i+k,end=" ")
16)    print()
```

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



Pattern-84:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(num-i),end="")
4)     for j in range(i,i+1):
5)         print("*",end=" ")
6)         if i>=2:
7)             print(" "*(2*i-4),end="")
8)             for k in range(i,i+1):
9)                 print("*",end=" ")
10) print()
```

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

Pattern-85:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(num-i),end="")
4)     for j in range(i,i+1):
5)         print(i,end=" ")
6)         if i>=2:
7)             print(" "*(2*i-4),end="")
8)             for k in range(i,i+1):
9)                 print(i,end=" ")
10) print()
```

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

Pattern-86:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(num-i),end="")
4)     for j in range(i,i+1):
```



```
5) print(num+1-i,end=" ")
6) if i>=2:
7)     print(" "*(2*i-4),end="")
8)     for k in range(i,i+1):
9)         print(num+1-i,end=" ")
10) print()
```

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

Pattern-87:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(num-i),end="")
4)     for j in range(i,i+1):
5)         print(chr(64+num+1-i),end=" ")
6)     if i>=2:
7)         print(" "*(2*i-4),end="")
8)         for k in range(i,i+1):
9)             print(chr(64+num+1-i),end=" ")
10) print()
```

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

Pattern-88:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(num-i),end="")
4)     for j in range(i,i+1):
5)         print(chr(64+i),end=" ")
6)     if i>=2:
7)         print(" "*(2*i-4),end="")
8)         for k in range(i,i+1):
9)             print(chr(64+i),end=" ")
10) print()
```



A
B B
C C
D D
E E

Pattern-89:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(i,i+1):
5)         print("*",end=" ")
6)         if i<=4:
7)             print(" "*(2*num-2*i-2),end="")
8)             for k in range(i,i+1):
9)                 print("*",end=" ")
10)    print()
```

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

Pattern-90:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(i,i+1):
5)         print(i,end=" ")
6)         if i<num:
7)             print(" "*(2*num-2*i-2),end="")
8)             for k in range(i,i+1):
9)                 print(i,end=" ")
10)    print()
```

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



Pattern-91:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(i,i+1):
5)         print(num-i+1,end=" ")
6)     if i<=4:
7)         print(" "*(2*num-2*i-2),end="")
8)         for k in range(i,i+1):
9)             print(num-i+1,end=" ")
10)    print()
```

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

Pattern-92:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(i,i+1):
5)         print(chr(64+num-i+1),end=" ")
6)     if i<=4:
7)         print(" "*(2*num-2*i-2),end="")
8)         for k in range(i,i+1):
9)             print(chr(64+num-i+1),end=" ")
10)    print()
```

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

Pattern-93:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(i,i+1):
5)         print(chr(64+i),end=" ")
6)     if i<=4:
```



```
7)      print(" "*(2*num-2*i-2),end="")
8)      for k in range(i,i+1):
9)          print(chr(64+i),end=" ")
10)     print()
```

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

Pattern-94:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(i-1),end="")
4)     for j in range(1,num+1):
5)         print("*",end=" ")
6)     print()
```

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

Pattern-95:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(num-i),end="")
4)     for j in range(1,i+1):
5)         print("*",end=" ")
6)     print(" "*(num-i),end="")
7)     for k in range(1,i+1):
8)         print("*",end=" ")
9)     print()
```

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



Pattern-96:

```
1) n=int(input("Enter a number:"))
2) for i in range(1,n+1):
3)     for j in range(1,i+1):
4)         if (i%2!=0 and j%2!=0 )or(i%2==0 and j%2==0):
5)             print("1",end=" ")
6)         else:
7)             print("0",end=" ")
8)     print()
```

```
1
0 1
1 0 1
0 1 0 1
1 0 1 0 1
0 1 0 1 0 1
1 0 1 0 1 0 1
```

Pattern-97:

```
1) num=int(input("Enter a number:"))
2) for i in range(1,num+1):
3)     print(" "*(2*num-i+3),end="")
4)     for j in range(1,i+1):
5)         print("*",end=" ")
6)     print()
7) for i in range(1,num+3):
8)     print(" "*(2*num-i+1),end="")
9)     for j in range(-1,i+1):
10)        print("*",end=" ")
11)    print()
12) for i in range(1,num+5):
13)    print(" "*(2*num-i),end="")
14)    for j in range(-2,i+1):
15)        print("*",end=" ")
16)    print()
17) for i in range(1,num+3):
18)    print(" "*((2*num)),end="")
19)    print("* *3)
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Pattern-98:

```
1) num=int(input("Enter a number"))
2) for i in range(1,num+1):
3)     print(" "*(2*num-i),end="")
4)     for j in range(1,i+1):
5)         print("*",end=" ")
6)     print()
7) for i in range(1,num+1):
8)     print(" "*(num-i),end="")
9)     for j in range(1,i+1):
10)        print("*",end=" ")
11)    print(" "*(num-i),end="")
12)    for k in range(1,i+1):
13)        print("*",end=" ")
14)    print()
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Pattern-99:

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1) n=int(input("Enter a number"))
2) for i in range(1,2*n+1):
3)     if i%2==0:
4)         print("*"*i,end=" ")
5)     else:
6)         print("*"*(i+1),end=" ")
7)     print()
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Pattern-100:

```
1) n=int(input("Enter a number:"))
2) for a in range(1,n+1,2):
3)     for i in range(1,n+1):
4)         print(" "*(2*n-i-a),end="")
5)         for j in range(1,i+a):
6)             print("*",end=" ")
7)         print()
8)     for b in range(1,n+1):
9)         print(" "*(n-2),end="")
10)    print("*"*3)
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