



# Pattern Programs

## Pattern-1:

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

```
1) n=int(input("Enter the number of rows: "))
```

```
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



ABCDEFGHIJ





```
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:

```
JJJJJJJJJJ
IIIIIIIIII
HHHHHHHHHH
GGGGGGGGGG
FFFFFFFFFF
EEEEEEEEEE
DDDDDDDDDD
CCCCCCCCCC
BBBBBBBBBB
AAAAAAAAAA
```

```
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
```

```
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:"))
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()
```



- U Squares
- U Right Angled Triangle
- U 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 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+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:

```
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+2-i):
4)         print(chr(65+n-i),end=" ")
5)     print()
```

## Pattern-22:

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

```
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: "))

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: "))  
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: "))  
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: "))
```

```
3) print(" "*(n-i),"* "*(2*i-1))
```

## Pattern-35:

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

```
1) n=int(input("Enter the number of rows: "))
```

```
3) print(" "*(n-i),(str(i)+" ")*(2*i-1))
```

## Pattern-36:

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

```
1) n=int(input("Enter the number of rows: "))
```

```
3) print(" "*(n-i),(str(chr(64+i)+" ")*(2*i-1))
```

## Pattern-37:

```
  A
 CCC
 E E E E E
G G G G G G G
I I I I I I I I
```



```
1) n=int(input("Enter the number of rows: "))  
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=" ")
```

## 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: "))
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=" ")
```

```
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 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
DDDDDDDD
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 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-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):
```



```
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:"))
3) print(" "*(num-i),end="")
```





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

```
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=" ")
```

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

## 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(" "*(num-p),end=" ")
```



```
9) for q in range(1,num+1-p):
```

```
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(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(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
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
```



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





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

## Pattern-99:

```
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,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(" "*(n-2))
```

