

# ass

Use the "Run" button to execute the code.

```
!pip install jovian --upgrade --quiet
```

```
import jovian
```

```
# Execute this to save new versions of the notebook  
jovian.commit(project="ass")
```

## Que-1

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

```
1  
12  
123  
1234  
12345
```

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

```
1  
22  
333  
4444  
55555
```

```
i=0  
  
while i<5:  
    j=1  
    i+=1  
    while j<i+1:  
        print(j, end='')  
        j+=1  
    print()
```

1  
12  
123  
1234  
12345

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

1  
12  
123  
1234  
12345  
1234  
123  
12  
1

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

12345  
1234  
123  
12  
1  
1  
12  
123

1234  
12345

```
for i in range(5,0,-1):
    for j in range(i,0,-1):
        print(j,end="")
    print()
for i in range(1,6):
    for j in range(i,0,-1):
        print(j,end="")
    print()
```

54321  
4321  
321  
21  
1  
1  
21  
321  
4321  
54321

```
#patten 6
for i in range(1,6):
    print(" "*(5-i),end='')
    for j in range(1,i+1):
        print(j,end=' ')
    print()
```

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

```
#pattern 7
for i in range(1,6):
    for j in range(5,i-1,-1):
        print(j,end="")
    print()
```

54321  
5432  
543

54

5

```
#pattern 8
for i in range (5,0,-1):
    for j in range(5,i-1,-1):
        print(j,end="")
    print()
```

5

54

543

5432

54321

```
#pattern 9
for i in range (6,0,-1):
    for j in range(1,i):
        print(j,end="")
    print()
```

12345

1234

123

12

1

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

12345

2345

345

45

5

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

12345

2345

345

45

5

```
#pattern 10
#r = int(input("enter no.of rows \n"))
k = 1
for i in range(5):
    for j in range(0,i+1):
        print(k,end=" ")
        k=k+1
    print()
```

1

2 3

4 5 6

7 8 9 10

11 12 13 14 15

```
k=1
i=1

while i<15:
    j=1
    while j<=i and k<=15:
        print(k,end=' ')
        k+=1
        j+=1
    i+=1
    print("")
```

1

2 3

4 5 6

7 8 9 10

11 12 13 14 15

```
#pattern 11
for i in range (1,6):
```

```

for j in range (i,0,-1):
    print(j,end="")
print()

```

```

1
21
321
4321
54321

```

```

#pattern12
n=int(input("Enter a no: "))
for i in range(1,n+1):#to print rows
    for j in range(1,i+1):#to print coloumns
        print(i, end=" ")
        i+=5
    print(" ")

```

Enter a no: 5

```

1
2 7
3 8 13
4 9 14 19
5 10 15 20 25

```

```

#pattern 15
for i in range(5,0,-1):
    print(" "*(5-i),end='')
    for j in range(1,i+1):
        print(j,end=' ')
    print()

```

```

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

```

```

#pattern12
n=int(input("Enter a no: "))
for i in range(1,n+1):#to print rows
    for j in range(1,i+1):#to print coloumns
        print(i, end=" ")
        i+=5
    print(" ")

```

Enter a no: 5

1  
2 7  
3 8 13  
4 9 14 19  
5 10 15 20 25

```
for i in range(1,6):  
    for j in range(1,i+1):  
        print(j,end=' ')  
    for j in range(i-1,0,-1):  
        print(j,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

```
#pattern 16  
for i in range(1,6):  
    print(" "*(5-i),end='')  
    for j in range(1,i+1):  
        print(j,end=' ')  
    print()  
for i in range(4,0,-1):  
    print(" "*(5-i),end='')  
    for j in range(1,i+1):  
        print(j,end=' ')  
    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

```
i=1  
  
while i<6:  
    j=1
```

```

while j<6 and j<=i :
    print(j,end=' ')

    j+=1
i+=1

print("")

```

```

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

```

```

i=ord('A')

while i<ord('F'):
    j=ord("A")
    while j<ord('F') and j<=i :
        print(chr(j),end=' ')

        j+=1
    i+=1

    print("")

```

```

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

```

```

n=int(input("Enter the no. of rows: "))
for i in range(1, n + 1):
    print(" "*(n-i),end='')
    c = 1
    for j in range(1, i + 1):

        print(c, end = " ")
        c = int(c * (i - j) / j)
    print(" ")

```

```

Enter the no. of rows: 5
1
1 1
1 2 1

```



1 3 3 1  
1 4 6 4 1

*#pattern 17*

```
for i in range(1,6):  
    print(" "*i,end='')  
    for j in range(i,6,):  
        print(j,end=" ")  
    print()  
for i in range(6,1,-1):  
    print(" "*(i-1),end='')  
    for j in range(i-1,6):  
        print(j,end=" ")  
    print()
```

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

*#pattern 17*

```
for i in range(1,6):  
    print(" "*i,end='')  
    for j in range(i,6,):  
        print(j,end=" ")  
    print()  
for i in range(6,1,-1):  
    print(" "*(i-1),end='')  
    for j in range(i-1,6):  
        print(j,end=" ")  
    print()
```

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

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

*#pattern 19*

```
for i in range (6,1,-1):
    print(" "*(i-1),end='')
    for j in range (i-1,6):
        print(j,end=" ")
    print()
```

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

*#pattern 20*

```
for i in range(1,6):
    print(" "*(5-i),end='')
    for j in range (1,i+1):
        print(j,end=" ")
    for j in range(i-1,0,-1):
        print(j,end=" ")
    print()
```

```
1
121
12321
1234321
123454321
```

*#pattern 21*

```
for i in range(1,6):
    for j in range (1,i+1):
        print(j%2,end=" ")
    print()
```

```
1
10
101
1010
10101
```

*#pattern 22*

```
for i in range(1,6):
    for j in range(1,6):
```

```

    if i==j:
        print(j,end="")
    else:
        print(0,end="")

print()

```

10000  
 02000  
 00300  
 00040  
 00005

```

#pattern 23
for i in range (1,6):
    print("1"*(5-i),end='')
    for j in range (1,i+1):
        print(i,end="")
    print()

```

11111  
 11122  
 11333  
 14444  
 55555

```

#pattern 24
for i in range (1,6):
    for j in range (i,6):
        print(j,end="")

    for j in range(4,i-1,-1):
        print(j,end="")
    print()

```

123454321  
 2345432  
 34543  
 454  
 5

*#pattern 25*

```
for i in range (1,6):  
    print(" "*(5-i),end='')  
    for j in range (i):  
        print(i,end= " ")  
    print()
```

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

*#pattern 26*

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

```
55555  
45555  
34555  
23455  
12345
```

*#pattern 27*

```
k=1  
i=1  
while i<15:  
    j=1  
    while j<=i and k<=15:  
        print(k,end=' ')  
        j+=1  
        k+=1  
    i+=1  
    print(" ")
```

```
1  
2 3  
4 5 6  
7 8 9 10  
11 12 13 14 15
```

```
lines=7
i=1

while i<=lines:
    j=1
    while j<=i:
        temp=i*j
        print(temp, end='', flush=True)
        print(" ", end='', flush=True)
        j=j+1
    print("")
    i=i+1
```

```
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
```