

① 0 2 3 4 5
 ② 1 1
 ③ 1 2 1
 ④ 1 2 3 1
 ⑤ 1 2 3 4 1

```

s=4
for i in range(1,6):
  for k in range(s):
    print(" ",end="")
  for j in range(1,i+1):
    if j==1 or j==i:
      print("1",end=' ')
    else:
      print(j,end=' ')
  print()
s=s-1
  
```

⑥ 1 1 1 1
 ⑦ a
 ⑧ a a
 ⑨ a b a
 ⑩ a b c a
 ⑪ a b c d a

```

s=4
for i in range(97,102):
  for k in range(s):
    print(" ",end="")
  for j in range(97,i+1):
    if j==97 or j==i:
      print("a",end=' ')
    else:
      print(chr(j),end=' ')
  s=s-1
  print()
  
```

Example:

```

rows=int(input("How many rows?"))
s=rows
k=rows
for i in range(rows,0,-1):
  for x in range(s):
    print(" ",end="")
  for j in range(rows,i-1,-1):
    print(j,end="")
  
```

```
if i!=rows:  
    for l in range(k,rows+1):  
        print(l,end="")  
    k=k-1  
print()  
s=s-1
```

Output

How many rows?9

```
9  
989  
98789  
9876789  
987656789  
98765456789  
9876543456789  
987654323456789  
98765432123456789
```

Example:

```
rows=int(input("How many rows?"))
```

```
s=rows
```

```
k=rows
```

```
for i in range(rows,1,-1):
```

```
    for x in range(s):
```

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

```
    for j in range(rows,i-1,-1):
```

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

```
    if i!=rows:
```

```
        for l in range(k,rows+1):
```

```
            print(l,end="")
```

```
        k=k-1
```

```
    print()
```

```
    s=s-1
```

```
s=1
```

```
k=1
```

```
for i in range(1,rows+1):
```

```
    for x in range(s):
```

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

```
for j in range(rows,i-1,-1):
    print(j,end="")
for l in range(k+1,rows+1):
    print(l,end="")
k=k+1
print()
s=s+1
```

How many rows?5

5
545
54345
5432345
543212345
5432345
54345
545
5

```
rows=int(input("How many rows?"))
```

```
s=rows
```

```
k=97+rows-1
```

```
for i in range(97+rows-1,97,-1):
    for x in range(s):
        print(" ",end="")
    for j in range(97+rows-1,i-1,-1):
        print(chr(j),end="")
    if i!=97+rows-1:
        for l in range(k,97+rows):
            print(chr(l),end="")
        k=k-1
    print()
    s=s-1
```

```
s=1
```

```
k=97
```

```
for i in range(97,97+rows+1):
    for x in range(s):
        print(" ",end="")
```

```
for j in range(97+rows-1,i-1,-1):
    print(chr(j),end="")
for l in range(k+1,97+rows):
    print(chr(l),end="")
k=k+1
print()
s=s+1
```

How many rows?5

```
e
ede
edcde
edcbcde
edcbabcde
edcbcde
edcde
ede
e
```

<https://www.hackerrank.com/challenges/designer-door-mat/problem?isFullScreen=true>