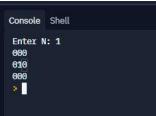
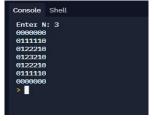
```
num = int(input("Enter N: "))
text = ""
text1 = ""
half = ""
list = []
list1 = []
if num<0 or num>9:
       print("error")
else:
    for i in range(0,num+1):
        n = str(i)*((num-i)+(num-i)+1)
        for j in range(0,i):
           text += str(j)
           text1 = text[::-1]
        half = text + n + text1
        list.append(half)
        text = ""
    for r in range(len(list)):
        list1.append(list[-(r+1)])
    for p in range(len(list)):
        print(f"{list[p]}")
   for u in range(1,len(list1)):
       print(f"{list1[u]}")
```









```
num = int(input("Enter N: "))
text = ""
text1 = ""
half = ""
list = []
list1 = []
if num<0 or num>9:
    print("error")
else:
    for i in range(0,num+1):
        for j in range(0,i):
           text += str(j)
           text1 = text[::-1]
        half = ((" "*(num-i))+text) + str(i) + text1
        list.append(half)
        text = ""
    for r in range(len(list)):
        list1.append(list[-(r+1)])
    for p in range(len(list)):
        print(f"{list[p]}")
    for u in range(1,len(list1)):
       print(f"{list1[u]}")
```

```
Console Shell

Enter N: 0
0
>
```

```
Console Shell

Enter N: 2
0
010
01210
010
0
>
```

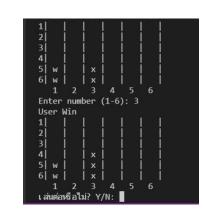
```
Console Shell

Enter N: 1
0
010
0
:
```

```
import random
data = \{\}
foundWinner = False
def table():
           for i in range(1,7):
                       print(f"\{i\}|\ \{data.get(f'\{i\}1','\ ')\}\ |\ \{data.get(f'\{i\}2','\ ')\}\ |\ \{data.get(f'\{i\}3','\ ')\}\ |\ 
ta.get(f'{i}4',' ')} | {data.get(f'{i}5',' ')} | {data.get(f'{i}6',' ')} | ")
           print(f" {1} {2} {3} {4} {5} {6}")
def drop(y,type):
           for x in range(6,0,-1):
                        if data.get(str(x)+str(y),False):
                                  if(type == 1):
                                              data[str(x)+str(y)]="x"
                                  elif(type == 2):
                                              data[str(x)+str(y)]="w"
                                  check(x,y)
def check(x,y):
           global foundWinner
           check1 = data.get(str(x)+str(y),False)
           check2 = data.get(str(x)+str(y-1),False)
           check3 = data.get(str(x)+str(y-2),False)
           if(check1 == "x" and check2 == "x" and check3 == "x"):
                       print("User Win")
                       foundWinner = True
           elif(check1 == "w" and check2 == "w" and check3 == "w"):
                       print("Computer Win")
                       foundWinner = True
           check1 = data.get(str(x)+str(y),False)
           check2 = data.get(str(x)+str(y+1),False)
           check3 = data.get(str(x)+str(y+2),False)
           if(check1 == "x" and check2 == "x" and check3 == "x"):
                       print("User Win")
                       foundWinner = True
           elif(check1 == "w" and check2 == "w" and check3 == "w"):
                       print("Computer Win")
                       foundWinner = True
           check1 = data.get(str(x)+str(y),False)
           check2 = data.get(str(x)+str(y+1),False)
```

```
check3 = data.get(str(x)+str(y-1),False)
if(check1 == "x" and check2 == "x" and check3 == "x"):
    print("User Win")
    foundWinner = True
elif(check1 == "w" and check2 == "w" and check3 == "w"):
    print("Computer Win")
    foundWinner = True
check1 = data.get(str(x)+str(y),False)
check2 = data.get(str(x-1)+str(y),False)
check3 = data.get(str(x-2)+str(y),False)
if(check1 == "x" and check2 == "x" and check3 == "x"):
    print("User Win")
    foundWinner = True
elif(check1 == "w" and check2 == "w" and check3 == "w"):
    print("Computer Win")
    foundWinner = True
check1 = data.get(str(x)+str(y),False)
check2 = data.get(str(x+1)+str(y),False)
check3 = data.get(str(x+2)+str(y),False)
if(check1 == "x" and check2 == "x" and check3 == "x"):
   print("User Win")
    foundWinner = True
elif(check1 == "w" and check2 == "w" and check3 == "w"):
    print("Computer Win")
   foundWinner = True
check1 = data.get(str(x)+str(y),False)
check2 = data.get(str(x+1)+str(y),False)
check3 = data.get(str(x-1)+str(y),False)
if(check1 == "x" and check2 == "x" and check3 == "x"):
    print("User Win")
    foundWinner = True
elif(check1 == "w" and check2 == "w" and check3 == "w"):
    print("Computer Win")
    foundWinner = True
check1 = data.get(str(x)+str(y),False)
check2 = data.get(str(x+1)+str(y-1),False)
check3 = data.get(str(x+2)+str(y-2),False)
if(check1 == "x" and check2 == "x" and check3 == "x"):
    print("User Win")
   foundWinner = True
```

```
elif(check1 == "w" and check2 == "w" and check3 == "w"):
        print("Computer Win")
        foundWinner = True
    check1 = data.get(str(x)+str(y),False)
    check2 = data.get(str(x-1)+str(y+1),False)
    check3 = data.get(str(x-2)+str(y+2),False)
    if(check1 == "x" and check2 == "x" and check3 == "x"):
        print("User Win")
        foundWinner = True
    elif(check1 == "w" and check2 == "w" and check3 == "w"):
        print("Computer Win")
        foundWinner = True
    check1 = data.get(str(x)+str(y),False)
    check2 = data.get(str(x-1)+str(y+1),False)
    check3 = data.get(str(x+1)+str(y-1),False)
    if(check1 == "x" and check2 == "x" and check3 == "x"):
        print("User Win")
        foundWinner = True
    elif(check1 == "w" and check2 == "w" and check3 == "w"):
        print("Computer Win")
        foundWinner = True
while True:
    table()
        n = int(input("Enter number (1-6): "))
        if n > 6 or n < 1:
            print("error")
            drop(n,1)
            table()
            if(foundWinner):
                t = input("เล่นต่อหรือไม่? Y/N: ")
                    data.clear()
                    foundWinner = False
                    break
                    print("error")
                    break
                break
            computer = random.randint(1,6)
            drop(computer,2)
            table()
            if(foundWinner):
```





```
data = [
"**L**"]
def genlist(text,pos):
    u = []
    if data[int(pos.split(",")[0])+1][int(pos.split(",")[1])+1] == text:
         u.append(f"{int(pos.split(',')[0])+1},{int(pos.split(',')[1])+1}")
    if data[int(pos.split(",")[0])+1][int(pos.split(",")[1])+0] == text:
         u.append(f"{int(pos.split(',')[0])+1},{int(pos.split(',')[1])+0}")
    if data[int(pos.split(",")[0])+1][int(pos.split(",")[1])-1] == text:
         u.append(f"{int(pos.split(',')[0])+1},{int(pos.split(',')[1])-1}")
    if data[int(pos.split(",")[0])+0][int(pos.split(",")[1])+1] == text:
         u.append(f"{int(pos.split(',')[0])+0},{int(pos.split(',')[1])+1}")
    if data[int(pos.split(",")[0])+0][int(pos.split(",")[1])-1] == text:
         \label{eq:uappend} \textbf{u.append}(\texttt{f"}\{\texttt{int}(\texttt{pos.split}(\texttt{','})[\texttt{0}])+\texttt{0}\},\{\texttt{int}(\texttt{pos.split}(\texttt{','})[\texttt{1}])-\texttt{1}\}")
    if data[int(pos.split(",")[0])-1][int(pos.split(",")[1])+1] == text:
         u.append(f"{int(pos.split(',')[0])-1},{int(pos.split(',')[1])+1}")
    if data[int(pos.split(",")[0])-1][int(pos.split(",")[1])+0] == text:
         u.append(f"{int(pos.split(',')[0])-1},{int(pos.split(',')[1])+0}")
    if data[int(pos.split(",")[0])-1][int(pos.split(",")[1])-1] == text:
         u.append(f"{int(pos.split(',')[0])-1},{int(pos.split(',')[1])-1}")
list_K = []
list_M = []
list_I = []
list_T = []
list_L = []
answer2 = []
```

```
for i in range(0,len(data)):
                 if "K" in data[i]:
                                  for j in range(0,len(data)):
                                                   if data[i][j] == "K":
                                                                    list_K.append(f"{i},{j}")
for K in list_K:
                 for M in genlist("M", K):
                                  list_M.append(M)
                                  for I in genlist("I", M):
                                                   list_I.append(I)
                                                   for T in genlist("T", I):
                                                                    list_T.append(T)
                                                                    for L in genlist("L", T):
                                                                                     list_L.append(L)
                                                                                     answer 2. append (f''K\{int(K.split(',')[0])+1\}, \{int(K.split(',')[1])+1\} \ M\{int(M.split(',')[1])+1\} \ M\{int(M.s
  ',')[0])+1},{int(M.split(',')[1])+1}    I{int(I.split(',')[0])+1},{int(I.split(',')[1])+1}    T{int(T.split(
    ',')[0])+1},{int(T.split(',')[1])+1} L{int(L.split(',')[0])+1},{int(L.split(',')[1])+1}")
print(*answer2,sep=("\n"))
print("KMITL Count =", len(answer2))
```

```
K3,2 M2,3 I3,3 T4,3 L5,3
K3,2 M2,2 I3,3 T4,3 L5,3
K3,4 M2,3 I3,3 T4,3 L5,3
KMITL Count = 3
PS C:\Users\USER>
```