Question **1**

Marked out of 10.00

Chirag is a pure Desi boy. And his one and only dream is to meet Santa Claus. He decided to decorate a Christmas tree for Santa on coming Christmas. Chirag made an interesting Christmas tree that grows day by day.

The Christmas tree is comprised of the following:

- · Parts
- · Stand

Each Part is further comprised of Branches. Branches are comprised of Leaves.

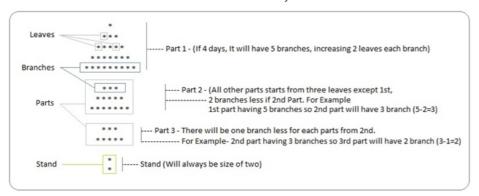
How the tree appears as a function of days should be understood. Basis that print the tree as it appears on the given day. Below are the rules that govern how the tree appears on a given day.

Write a program to generate such a Christmas tree whose input is number of days.

Rules:

- 1. If tree is one-day old, you cannot grow. Print a message "You cannot generate Christmas tree".
- 2. Tree will die after 20 days; it should give a message "Tree is no more".
- 3. Tree will have one part less than the number of days. E.g.
 - On 2nd day tree will have 1 part and one stand.
 - On 3rd day tree will have 2 parts and one stand.
 - On 4th day tree will have 3 parts and one stand and so on.
- 4. Top-most part will be the widest and bottom-most part will be the narrowest.
- 5. Difference in number of branches between top-most and second from top will be 2.
- 6. Difference in number of branches between second from top and bottom-most part will be 1.

Below is an illustration of how the tree looks like on 4th day



Input Format:

First line of input contains k - the number of inputs

The next k lines denote the number of days N

Output Format:

Print Christmas Tree for given N

OR

Print "You cannot generate Christmas tree" if N <= 1

OR

Print "Tree is no more" if N > 20

Constraints:

0<= N <=20

Example:

Input:

2

1

2 Output: You cannot generate Christmas tree **** Input 5 0 1 2 1000 5 **Expected Output** You cannot generate Christmas tree You cannot generate Christmas tree *** Tree is no more **** ***** ***** ***** **** ***** ***** *** **** ***** For example:

118.185.187.137/moodle/mod/quiz/review.php?attempt=214580&cmid=2362

Input	Result			
2	You cannot generate Christmas tree			
1	*			
2	***			

	*			
	*			
5	You cannot generate Christmas tree			
0	You cannot generate Christmas tree			
1	*			
2	***			
1000	****			
5	*			
	*			
	Tree is no more			
	*			

	*			
	*			

Answer: (penalty regime: 0 %)

```
for i in range(int(input())):
 2
         c=int(input())
         if(c<=1):
 3 •
 4
              print("You cannot generate Christmas tree")
 5 🔻
         elif(c>20):
             print("Tree is no more")
 6
 7
         else:
 8 •
              for i in range(c+1):
                   for j in range(i,c):
    print(" ",end="")
 9
10
11 •
                   for k in range(i):
                      print("*",end="")
12
13
                   for l in range(i+1):
                      print("*",end="")
14
15
                   print()
16
              t=c+1-2
17
              p=t
              if(c>2):
18
19
                   while(t>1):
20 🔻
                       for i in range(t):
                            for j in range(i,p):
    print(" ",end='')
21
22
23
                            for k in range(i+2):
                                print("*",end="")
24
                            for l in range(i+1):
    print("*",end="")
25
26
27
                            print()
28
                       t=t-1
              for i in range(2):
29
                  for j in range(p+1):
    print(" ",end='')
30 ▼
31
                  for j in range(1):
    print("*")
32
33
34
35
36
37
```

	Input	Expected	Got	
~	2	You cannot generate Christmas tree	You cannot generate Christmas tree	~
	1	*	*	
	2	***	***	
		****	****	
		*	*	
		*	*	
~	5	You cannot generate Christmas tree	You cannot generate Christmas tree	~
	0	You cannot generate Christmas tree	You cannot generate Christmas tree	
	1	*	*	
	2	***	***	
	1000	****	****	
	5	*	*	
		*	*	
		Tree is no more	Tree is no more	
		*	*	
		***	***	
		****	****	
		*****	*****	
		******	*****	
		******	******	
		***	***	
		****	****	
		*****	*****	
		******	*****	
		***	***	
		****	****	
		*****	*****	
		***	***	
		****	****	
		*	*	
		*	*	

Passed all tests! ✓