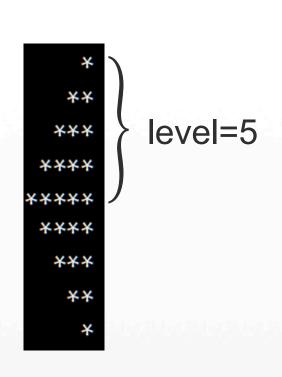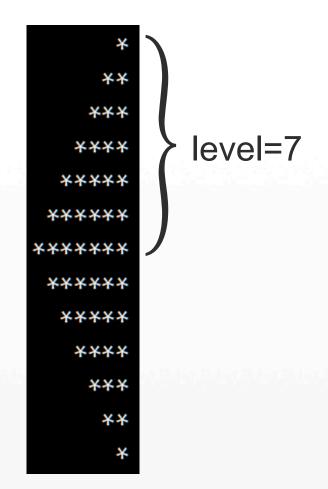# Take-home assignment one

- Submit source codes (.py or .ipynb file) and a screenshot of the output. The source codes should be properly documented such that they are readable.

Take-home assignment one

1. Please write a Python program that draws a sideway tree pointing left. The level of the tree is provided during runtime.

```
    *
   **
  ***
 ****
*****
 ****
  ***
   **
    *
```
level=5

```
      *
     **
    ***
   ****
  *****
 ******
*******
 ******
  *****
   ****
    ***
     **
      *
```
level=7

Take-home assignment one

2. Please write a Python program that draws the following patterns, where the numbers of rows and columns are provided during runtime (assume as least 2 rows and 2 columns). The following shows four example patterns, and your program should allow the user to provide arbitrary numbers of rows and columns.

```
                                                                    + - - - - +
                                                                    |         |
                                                                    |         |
                            + - - +          + - - - - +            |         |
            + +             |     |          |         |            |         |
            + +             |     |          |         |            |         |
                            + - - +          + - - - - +            + - - - - +

          row = 2          row = 3          row = 3                row = 6
          column = 2       column = 4       column = 6             column = 6
```