Once there is a boy and an Apple Tree.

Apple Tree

A hangman game written in Python 3

Example Game Trace

Author: Zhou Xinzi (FS2)
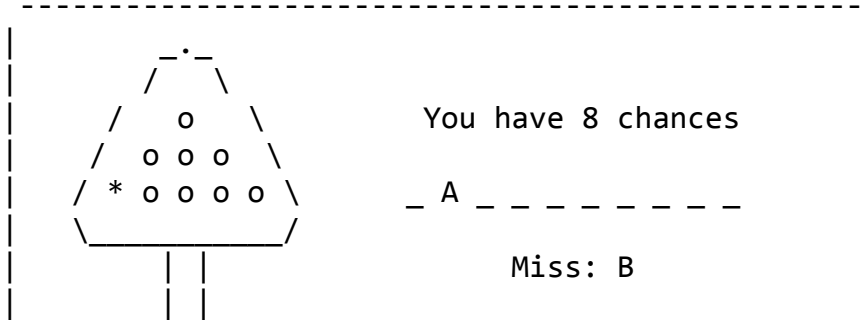
```
=======================================================
>>>              Welcome to AppleTree              <<<
=======================================================
  Please choose a topic by entering its number:
     1: SNACK
     2: FRUIT
     3: VEGETABLE
     4: COUNTRY
  Your choice: -1
  - Sorry, please enter the number before the topic you
would like to choose.
  Your choice: a
  - Sorry, please enter the number before the topic you
would like to choose.
  Your choice: 2
  - The story begins...
  - Now you are to guess a word about FRUIT.

   ---------------------------------------------------
  |        _._                                        |
  |       /   \                                       |
  |      /  o  \           You have 9 chances         |
  |     /  o o o  \                                   |
  |    / o o o o o \       _ _ _ _ _ _ _ _ _ _         |
  |    _____/                                  |
  |         | |               Miss:                   |
  |         | |                                       |
   ---------------------------------------------------
  Your guess: a
  - Congratulation!

   ---------------------------------------------------
  |        _._                                        |
  |       /   \                                       |
  |      /  o  \           You have 9 chances         |
  |     /  o o o  \                                   |
  |    / o o o o o \       _ A _ _ _ _ _ _ _ _         |
  |    _____/                                  |
  |         | |               Miss:                   |
  |         | |                                       |
   ---------------------------------------------------
  Your guess: b
  - Guess fails :(
```

```
----------------------------------------------
|        _._                                  |
|      /    \                                 |
|     /   o   \        You have 8 chances     |
|    /  o o o  \                              |
|   / * o o o o \      _ A _ _ _ _ _ _ _      |
|   _____/                             |
|       | |               Miss: B            |
|       | |                                   |
----------------------------------------------
 Your guess: T
 - Congratulation!


----------------------------------------------
|        _._                                  |
|      /    \                                 |
|     /   o   \        You have 8 chances     |
|    /  o o o  \                              |
|   / * o o o o \      _ A T _ _ _ _ _ _      |
|   _____/                             |
|       | |               Miss: B            |
|       | |                                   |
----------------------------------------------
 Your guess: 1
 - Sorry, please enter a letter.


----------------------------------------------
|        _._                                  |
|      /    \                                 |
|     /   o   \        You have 8 chances     |
|    /  o o o  \                              |
|   / * o o o o \      _ A T _ _ _ _ _ _      |
|   _____/                             |
|       | |               Miss: B            |
|       | |                                   |
----------------------------------------------
 Your guess: B
 - You have already tried letter B
```

This is the example of inputting an upper case letter.

If the user input anything other than English letters, error messages will be displayed.

If the user input a letter he has tried before (either correct or wrong), an error message will be displayed.
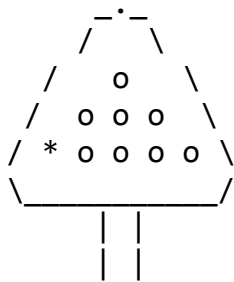
```
-----------------------------------------------
|                                              |
|         _._                                  |
|        /   \          You have 8 chances     |
|      /   o   \                               |
|     /  o o o  \                              |
|    / * o o o o \      _ A T _ _ _ _ _ _      |
|    _____/                             |
|         | |           Miss: B                |
|         | |                                  |
-----------------------------------------------
 Your guess: water
 - Congratulation!


-----------------------------------------------
|                                              |
|         _._                                  |
|        /   \          You have 8 chances     |
|      /   o   \                               |
|     /  o o o  \                              |
|    / * o o o o \      W A T _ _ _ _ _ _      |
|    _____/                             |
|         | |           Miss: B                |
|         | |                                  |
-----------------------------------------------
 Your guess: e
 - Congratulation!


-----------------------------------------------
|                                              |
|         _._                                  |
|        /   \          You have 8 chances     |
|      /   o   \                               |
|     /  o o o  \                              |
|    / * o o o o \      W A T E _ _ E _ _ _    |
|    _____/                             |
|         | |           Miss: B                |
|         | |                                  |
-----------------------------------------------
 Your guess: r
 - Congratulation!
```
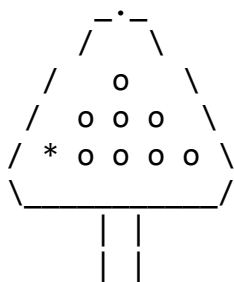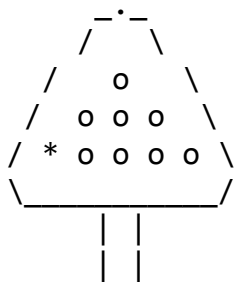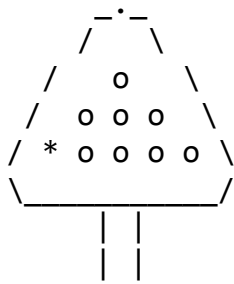
If user inputs more than one letter, the program will assume that the first letter is the user's guess.

```
------------------------------------------------
|         _._                                    |
|        /   \                                   |
|       /  o  \        You have 8 chances        |
|      /  o o  \                                 |
|     / * o o o \     W A T E R _ E _ _ _        |
|     _____/                                |
|         | |            Miss: B                 |
|         | |                                    |
------------------------------------------------
 Your guess: m
 - Congratulation!


------------------------------------------------
|         _._                                    |
|        /   \                                   |
|       /  o  \        You have 8 chances        |
|      /  o o  \                                 |
|     / * o o o \     W A T E R M E _ _ _        |
|     _____/                                |
|         | |            Miss: B                 |
|         | |                                    |
------------------------------------------------
 Your guess: l
 - Congratulation!


------------------------------------------------
|         _._                                    |
|        /   \                                   |
|       /  o  \        You have 8 chances        |
|      /  o o  \                                 |
|     / * o o o \     W A T E R M E L _ _        |
|     _____/                                |
|         | |            Miss: B                 |
|         | |                                    |
------------------------------------------------
 Your guess: o
 - Congratulation!
```
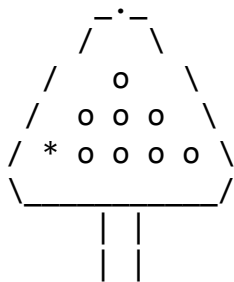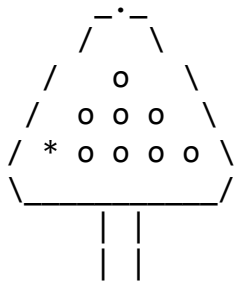
There is nothing very important in this page :)

```
-------------------------------------------------
|         _._                                    |
|        /   \                                   |
|       /  o  \        You have 8 chances        |
|      /  o o o \                                |
|     / * o o o o \    W A T E R M E L O _        |
|     _____/                              |
|          | |             Miss: B               |
|          | |                                   |
-------------------------------------------------
   Your guess: n
   - Congratulation!
*************************************************
*         _._                                   *
*        /   \                                  *
*       /  o  \                                 *
*      /  o o o \           You WIN!!!          *
*     / * o o o o \                             *
*     _____/     The word is WATERMELON  *
*          | |                                  *
*          | |                                  *
*************************************************
   Do you want to start a new journey?
   - Enter Y for yes, or press enter to leave.
   Your choice: y
=================================================
>>>              Welcome to AppleTree         <<<
=================================================
   Please choose a topic by entering its number:
      1: SNACK
      2: FRUIT
      3: VEGETABLE
      4: COUNTRY
   Your choice: 1
   - The story begins...
   - Now you are to guess a word about SNACK.

-------------------------------------------------
|         _._                                    |
|        /   \                                   |
|       /  o  \        You have 9 chances        |
|      /  o o o \                                |
|     / o o o o o \        _ _ _ _               |
|     _____/                              |
|          | |             Miss:                 |
|          | |                                   |
-------------------------------------------------
   Your guess: q
   - Guess fails :(
```

Display the winning message if the user guessed the whole word before using up all 9 chances.

The program will restart automatically if the user inputs "y" or "Y".

There is no important message in the following pages unless there is comment on the right.
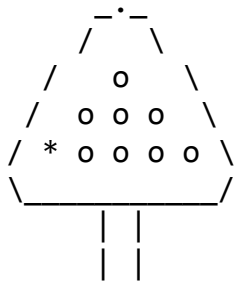
```
------------------------------------------------
|        _._                                     |
|       /   \                                    |
|      /  o  \        You have 8 chances         |
|     /  o o o \                                 |
|    / * o o o o \       _ _ _ _                 |
|    _____/                                |
|        | |           Miss: Q                   |
|        | |                                     |
------------------------------------------------
 Your guess: w
 - Guess fails :(


------------------------------------------------
|         _._                                    |
|        /   \                                   |
|       /  o  \       You have 7 chances         |
|      /  o o o  \                                |
|     / * * o o o \      _ _ _ _                  |
|     _____/                               |
|         | |          Miss: Q W                 |
|         | |                                    |
------------------------------------------------
 Your guess: e
 - Guess fails :(


------------------------------------------------
|         _._                                    |
|        /   \                                   |
|       /  o  \       You have 6 chances         |
|      /  o o o  \                                |
|     / * * * o o \      _ _ _ _                  |
|     _____/                               |
|         | |          Miss: Q W E               |
|         | |                                    |
------------------------------------------------
 Your guess: r
 - Guess fails :(
```
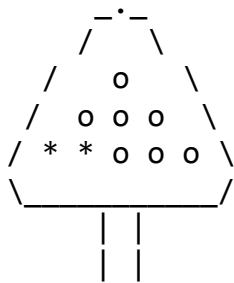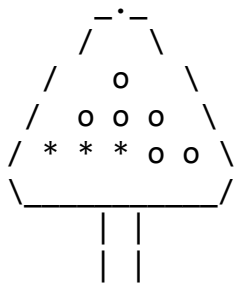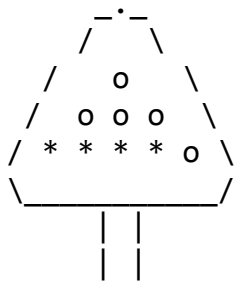
```
-------------------------------------------------
|                                               |
|          _._                                  |
|        /     \                                |
|       /   o   \         You have 5 chances    |
|      /  o o o  \                              |
|     / * * * * o \         _ _ _ _             |
|     _____/                             |
|          | |             Miss: Q W E R        |
|          | |                                  |
-------------------------------------------------
  Your guess: t
  - Congratulation!


-------------------------------------------------
|                                               |
|          _._                                  |
|        /     \                                |
|       /   o   \         You have 5 chances    |
|      /  o o o  \                              |
|     / * * * * o \         _ _ _ T             |
|     _____/                             |
|          | |             Miss: Q W E R        |
|          | |                                  |
-------------------------------------------------
  Your guess: y
  - Guess fails :(


-------------------------------------------------
|                                               |
|          _._                                  |
|        /     \                                |
|       /   o   \         You have 4 chances    |
|      /  o o o  \                              |
|     / * * * * * \         _ _ _ T             |
|     _____/                             |
|          | |             Miss: Q W E R Y      |
|          | |                                  |
-------------------------------------------------
  Your guess: u
  - Guess fails :(
```
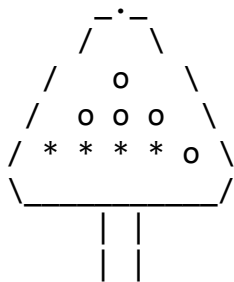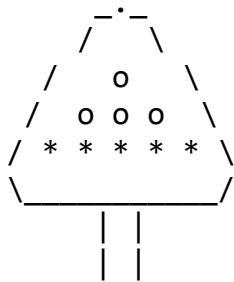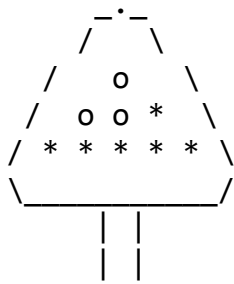
```
 --------------------------------------------------
|                                                  |
|          _.._                                    |
|         /    \          You have 3 chances       |
|        /  o   \                                  |
|       /  o o * \            _ _ _ T              |
|      / * * * * *\                                |
|      _____/        Miss: Q W E R Y U       |
|           | |                                    |
|           | |                                    |
 --------------------------------------------------
 Your guess: i
 - Congratulation!


 --------------------------------------------------
|                                                  |
|          _.._                                    |
|         /    \          You have 3 chances       |
|        /  o   \                                  |
|       /  o o * \            _ I _ T              |
|      / * * * * *\                                |
|      _____/        Miss: Q W E R Y U       |
|           | |                                    |
|           | |                                    |
 --------------------------------------------------
 Your guess: o
 - Guess fails :(


 --------------------------------------------------
|                                                  |
|          _.._                                    |
|         /    \          You have 2 chances       |
|        /  o   \                                  |
|       /  o * * \            _ I _ T              |
|      / * * * * *\                                |
|      _____/        Miss: Q W E R Y U O     |
|           | |                                    |
|           | |                                    |
 --------------------------------------------------
 Your guess: p
 - Guess fails :(
```
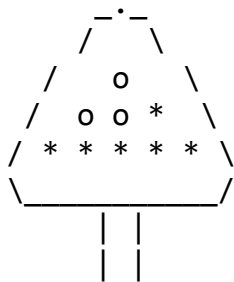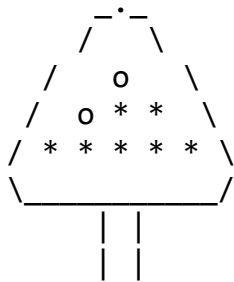
9

```
    -------------------------------------------------
    |                                               |
    |          _._                                  |
    |         /   \          You have 1 chance      |
    |        /  o  \                                |
    |       /  * * *  \         _ I _ T             |
    |      / * * * * * \                            |
    |      _____/     Miss: Q W E R Y U O P  |
    |           | |                                 |
    |           | |                                 |
    |           | |                                 |
    -------------------------------------------------
      Your guess: a
      - Guess fails :(
    *************************************************
    *            _._                                *
    *           /   \                               *
    *          /  *  \                              *
    *         /  * * *  \        You LOSE.          *
    *        / * * * * * \                          *
    *        _____/    The word is MINT      *
    *             | |                               *
    *             | |                               *
    *************************************************
      Do you want to start a new journey?
      - Enter Y for yes, or press enter to leave.
      Your choice:
      - See you :)

    Process finished with exit code 0
```

If there is only one chance left, the word "chances" will be replaced by "chance".

When the user choose to leave, a "see you" message will be displayed.

And …
I choose not to make it a GUI program because the whole program will be quite different and hard to read if so.

One more thing,
Have a nice day!