

Lab 05 - Assignment
List and Loops
CS 112 – Summer 2022

Description



Bubble, Blossom and Buttercup love to eat fruits, but sometimes they don't know which one to choose, so Professor Utonium places a row of **20** fruits, each one under a box, so that they each select 5 fruits at random.

First, he asks Blossom to select one of the first four boxes, (which will be the first fruit), then he asks her to say a number between 1-4 that will be the *distance between each of the boxes that will be uncovered* to select the remaining 4 fruits.

This is how the fruits were placed:



Professor Utonium wants your help to find out which 5 fruits were randomly selected.

Facts you already know:

- **Fruits:** apple 🍏, banana 🍌, pineapple 🍍, orange 🍊 and grape 🍇
- **For the user:** the first box is at position 1 and the last box is at position 20
- 5 boxes are always uncovered (no more and no less)
- To select the 4 remaining fruits, we start from the point where we are at this moment, that is, the place of the first selected fruit.

Inquire:

- Place of the first box to be uncovered [1-4]
- Distance between each of the 4 remainder boxes that will be uncovered [1-4]

Requirements:

- Use a `list` to represent how the fruits are placed (could be emojis or fruit names)
- Use `for-loop` to uncover the boxes to see which fruit was selected
- Show the selected fruits in the same line (Hint: use `end=' '`)

Allowed things:

- Any arithmetic operators are all fine to use, such as `+`, `-`, `*`, `**`, `/`, `%`, and, or, `=`, etc.
- Any relational operator: `<`, `<=`, `==`, etc.
- Branching: `if`, `if-else`, `if-elif-else`
- These functions `print()`, `int()`, `str()`, `range()`, `list()`

Disallowed things:

- You are not allowed to `import` anything
- You are not allowed to use any features not covered in lecture yet