

Lab 06 - Assignment

Multi-dimensional list

CS 112 – Summer 2022

Description

Dipper put his new hat in a locker but forgot which one he put it in. Lunch time is about to start and he doesn't want to spend a lot of time looking for his hat, so **at most** he has time to **open 3 lockers**. If he doesn't find it, he will come back after finishing lunch.

Do you think that 3 attempts are enough to find his hat?

Facts you already know:

- When Dipper finds his hat, he no longer opens any locker, it's over!
- Every time a locker is randomly selected, Dipper needs to know its coordinate `[x][y]`
- If a locker is selected two or three times, what is inside the locker is always the same

Requirements:

- You can use emojis or strings to represent what is inside each locker
- Ask the user to press any key to open a locker

```
#copy this code at the top of your program
import random
indices=[0,1,2]
#copy this code to randomly select a locker
x=random.choice(indices)
y=random.choice(indices)
```

Output:

- The locker opened indicating its coordinates and what's inside, e.g.:
Press any key to open a locker
Attempt 1: L[0][0] 📖
Press any key to open a locker
Attempt 2: L[0][0] 📖
Press any key to open a locker
Attempt 3: L[0][1] 🕷️
- If Dipper doesn't find his hat after 3 attempts, display: **"hat not found, please try again later"**
- If Dipper finds his hat, display: **"hat found, it's over!"**

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()`, `input()`, `int()`, `str()`, `range()`, `list()`

Disallowed things:

- You are only allowed to `import random`
- You are not allowed to use any features not covered in lecture yet
- No hard coding

Here's what's inside each locker:

