In this exercise, you are to implement a method called `insert()` within a version of a HashTable we've provided.

To start, download `ex10.py` and `ex10_pyta.txt` and read through the code provided in the `if __name__ == '__main__'` block.

Read through the HashTable class carefully and implement `insert()`. We have provided you with the HashTable's `__init__`, `__str__`, and a `get_hash()` function which will turn a key into a number.

This exercise will require you to have PythonTA installed. If you haven't done so already, go through `lab1` and the instructions on the Software page to install and set up PyCharm with PythonTA.

**add**

`insert()` takes in a key and a value and adds it to the HashTable. This HashTable uses chaining and is implemented using lists of lists.

**Submission**

Exercises are to be submitted through MarkUs in the ex10 folder. Submit only `ex10.py`.

To log in to MarkUs, use your UTORid as the log-in name. The password is your teaching labs password. If you have not set this up or have forgotten your password, go to the Teaching Lab's Account Management Page and (re)set your password.

**Grading Scheme**

This exercise will be graded out of 4 marks, broken down as follows:

- 2 marks for being able to run the client code without issue (no assertion errors raised)
- 1 mark for passing PythonTA
- 1 mark for passing hidden test cases (which use your client code in other ways)
  - Details on what the hidden test cases will/won't test are describe below.

All of these marks are 'all-or-nothing' (i.e. you'll either get 0 on that criteria, or full marks).

**Hidden Test Cases**

Things that the hidden test case might test:

- Any (key, value) pairs possible (where the key is a string)