

# CSE 1321L: Programming and Problem Solving I Lab

## Lab 8

### Sequence Types (Part 1)

#### What students will learn

- o Sequence types.
- o Creating lists and tuples.
  - o Lab8A: Sign me up
  - o Lab8B: Remember me

#### Overview

One of the data types available in Python is the Sequence Type. Unlike integers or floats, Sequence **hold more than one “element”; or no element at all string**. Strings can hold any number of characters, from 0 to many

0 indexed, meaning that the first element in the string is in **position 0**

```
name = "Alice"
```

```
print(name[0])
```

Another very helpful sequence type is the List. Lists can also store any number of elements, from 0 to many. Unlike strings, lists can store any data type, including other lists:

```
mylist = []
```

```
print(mylist)
```



## Lab8A: Sign me up

are very helpful with the emails they send, some are simply used to send ads or spam. We'll code a very simple mailing list which allows the adding or rem

### Requirements:

- o **This program must feature a list** which remembers every entry that is added to it.
- o The program should also feature a loop with the prompts for the following options:
  - x Add email
  - x Delete email
  - x List all emails
  - x Quit
- o



## Lab8B: Remember me

We'll write a simple application which allows for the storage of the names and ages of the user's friends. A person's information will be stored in a tuple, with the first index holding their name and age as strings). These tuples will be stored in a list. As such, if we stored "Alice" with the age of "30", "Bob" with the age of "40", and "Charlie" with the age of "50" in our list, and then tried to print out the list, we would get the following:

```
[("Alice", "30"), ("Bob", "40"), ("Charlie", "50")]
```

- o The program must feature a List which will contain Tuples

2 - List friends

3 - Quit

Make your selection: 1

Enter your friend's name: Charlie

Enter your friend's age: 50

Friend added

1 - Add friend

2 - List friends

3 - Quit

Make your selection: 2

Name: Alice, Age: 30

Name: Bob, Age: 40

Name: Charlie, Age: 50

1 - Add friend

2 - List friends

3 - Quit

Make your selection: 3

Shutting down...

### Submission Instructions:

- o Programs must follow the output format provided. This includes each blank line, colons (:), and other symbols.
- o Programs must be working correctly.
- o Programs must be written in Python.
- o Programs must be submitted with the correct .py format.
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