

## List Comprehension and Review

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You must get checked out by your lab CA **prior to leaving early**. If you leave without being checked out, you will receive 0 credits for the lab.

### Restrictions

The Python structures that you use in this lab should be restricted to those you have learned in lecture so far. Please check with your teaching assistants in case you are unsure whether something is or is not allowed!

**Create a new python file for each of the following problems.**

**Your files should be named `_lab[num]q[num].py` similar to homework naming conventions.**

### Problem 1: *List Comprehension*

Use Python's list comprehension syntax to generate the following lists:

```
[1, 2, 4, 8, 16, 32, 64, 128]
```

```
[0, 2, 4, 6, 8]
```

### Problem 2: *Fill in the blank*

Finish the following list comprehension syntax. The result is a list of characters of the input repeated twice. Do not use any arithmetic operators or additional libraries. Your answer must use `my_str` and `length`.

```
my_str = input("Enter a string:")
length = len(my_str)
print([_____])
```

```
my_str = "Python" → ["P","y","t","h","o","n","P","y","t","h","o","n"]
```

```
my_str = "Java" → ["J","a","v","a","J","a","v","a"]
```