Lecture 11

Queries

1 Strings (continued)

Revisit the function `char_upper` that will take a single character and return the uppercase version.

Let's write a function called `str_upper` using `char_upper`. (Already did in 2nd section but should probably revisit anyway.) Also talk about `split` in first section.

2 Lists of Lists

Write a 2 dimensional sum function.

3 Searching

Write a `contains` function and an `index_of` function.

Slicing

```
lst = [3, -6, 10, 12, 1, 88]

lst[2:4] # can get a sublist!
lst[:4]  # can leave off start (will default to 'beginning')
lst[3:]  # can leave off stop  (will defailt to 'end')
lst[:]

lst[-2:] # we can still use negative indices

lst[3:20] # what will this do??
lst[-20:] # this one?
lst[4:2]  # ?

string = "banana"
string[2:5] # you can slice a string!!

words = ["banana", "hi", "cat", "student", "thing"]
words[1:3]   # a list of strings!!
words[3][:3] # what'll it do???
```

4 String Reverse

For more practice, let's write a function to reverse a string! And by us I mean y'all! Go!

```
def rev_string(string):
    backwards = []
```

```
    for index in range(len(string) - 1, -1, -1):
        backwards.append(string[index])

    return "".join(backwards)

def rev_string(string):
    backwards = list(string)
    i = 0
    j = len(string) - 1
    while i < j:
        temp = rev[i]
        rev[i] = rev[j]
        rev[j] = temp
        i += 1
        j -= 1

    return "".join(backwards)
```

Project 2 Solution

Go over my solution.