**What to use? Indexing/extracting, slicing, .find(), .split(), .append(), or .index()?**

**Indexing/extracting are two ways of saying the same thing. This means using [ ], square brackets, to pick ONE element out of a sequence.**

**Slicing means using [ ], square brackets, with a : somewhere inside them, to take some PART of a sequence.**

**.split(), .find(), and .index() are methods – some are methods on strings, some on lists. Think: what is the input to each of these things? What do you get back, or what CAN you get back?**

**Think about what expression you need to write to get what the question is asking for.**

ab = [4, “h”, 6.0, 5, “hello”]

What to use to get just the integer 4 from that list?

**Indexing/extracting**

**Print ab[0]**

What to use to get a list of the elements [5, “hello”]?

**Slicing**

**Print ab[-2:]**

What to use to get just the float 6.0 from the list?

**Indexing/extracting**

**Print ab[2]**

new\_lst = [[“hi”, “106”, 110], 5, “bye”]

What to use to get just the list [“hi”,”106”, 110]?

**Indexing/extracting**

What to use to get a list with the elements [5, “bye”]?

**Slicing**

What to use to get the string “bye”?

**Indexing/extracting**

What type is the evaluation of the expression new\_lst[-2:]?

**list**

What type is the evaluation of the expression new\_lst[1]?

**Integer**

What to use to get the index (the number) of the 5?

**.index() method**

What to use to add the string “see ya” to the end of  new\_lst?

**.append() method**

str\_new = “Why, the sea is boiling hot!”

What to use to find the last character of this string?

**Indexing/extracting (str\_new[-1] is the expression)**

What to use to find the sixth (as HUMANS count) character of this string?

**Extracting – str\_new[5]**

What to use to get just the string “the sea is boiling hot!” ?

**Slicing**

What to use to get a list [“Why,”, “the”, “sea”,”is”,”boiling”,”hot!”]?

**.split() method: str\_new.split()**

What about to get a list [“Why”, “ the sea is boiling hot!”]?

**.split() method: str\_new.split(“,”)**

What to use to get the index of the first ‘t’ character in the string? (That’s a lowercase ‘t’)

**.find() method**

Why might you want to find the index of the first ‘t’ character in the string, anyway?

**Solve a puzzle, find where to index for some reason… the possibilities are endless!**