Lesson Eight

Math 6080 (for the Masters Teaching Program), Summer 2020

Arrays. An array in Python is a list of data. For example:

Days = ["Sunday","Monday","Tuesday","Wednesday","Thursday","Friday","Saturday"]

is an array (list) of the days of the week. Data type: strings.

$$\text{Small\_Primes} = [2,3,5,7,11,13,17,19]$$

is an array (list) of the prime numbers less than 20. Data type: integers.

You can also mix data types in an array.

$$\text{Ones} = [1,1.0,\text{"one"}]$$

is a perfectly fine array, though I'd recommend avoiding mixed types if possible.

Like strings, the following commands work with arrays:

len(Days) returns 7

Days[0] returns 'Sunday'

In addition, there are some new commands:

Small_Primes.append(23) will append 23 to the list of small primes.

Small_primes.pop(1) will remove the prime 3 from the list.

Days.remove("Wednesday") will remove Wednesday from the list of days.

Exercise. Create an array filled with all the prime numbers less than 1000 (making use of your Python code from an earlier exercise).