* **Data types**

float, int, str, bool

e.g. int(), float(), bool(), str() are functions that change the data types of variables

* **Lists**

**#creating a list of lists**

famHeight = [ [“Liz”, 1.76],

[ “Emma”, 1.60],

[“mom”, 1.70]

]

**#Subsetting lists**

fam[0] -> **Selecting elements at index 0**

fam[-1] ->Selecting the last element

**#List slicing**

fam[3:5] -> returns the elements at index 3 and 4; the upper end (5) is excluded

fam[:4] -> 0 to 4 (excluded)

fam[5:] -> 5 to the last element (included)

**#List manipulation**

fam[0: 2] = [“Lisa”, 1.74] -> **changing** the first two elements of the list

fam + [“me”, “1.77”] -> **adding** new elements to the list

del(fam[2]) -> **removing** the second element

del(fam[0:2]) ->removing 1st and 2nd element

X = [“a”, “b”, “c”]

Y = X

Y[1] = “z” -> this changes X[1] as well because the reference to X passed to Y

#**Copying** a list

Y = list(X) or Y = X[:]