

Exercise: Python Overview

Question

- define variables of each basic python type
- they should describe you (name, age, location, etc.)
- print these out
- print all strings in upper case
- print whether your age is over 18
- print 10 dashes

Question

- define a functions called :
 - `mean` which takes three parameters and returns their mean
 - `cube` which cubes its first argument
 - `is_adult` which says whetehr its first argument is more than 18
- define three variables:
 - `mean_ages` which is mean of 18,18,20
 - `two_later` which is 2 cubed
 - `teen_is_adult` which is whether an age of 15 is adult
- define function `show()`
 - which prints the three variables above

Question

- define a list `cart` which is a shopping cart
 - add several items to it
 - print out the first, last and middle two items
 - insert a new item at the start
 - print the whole list

Question

- import pandas, matplotlib's pyplot with the standard alises
- define a dictionary called `facebook_users`
- keys are columns: "uid, followers, friends, total_comments, total_likes"
- values are lists (rows): eg., a list of user ids
- create a pandas data frame from this dictionary
- use matplotlib to draw a scatter of the dictionary: followers vs total_likes

Question

- define a list of names
- use a list comprehension to make a new list of
 - uppercase names
 - lowercase names
 - booleans, where True if the length of the name is more than 5 characters