Tuesday 2/18

Welcome!

Announcements:

- Results for g12, g13 are posted on Blackboard
- Exercises g14, g15 are posted and due Friday 2/21

- Upcoming panel discussion on 2/27:

THE PROPOSED DISMANTLING OF THE U.S. DEPARTMENT OF EDUCATION: WHAT'S AT STAKE FOR STUDENTS, FAMILIES, AND COMMUNITIES?

FEBRUARY 27, 2025

1:00-2:00 PM EST
ZOOM

The new Presidential Administration has proposed to drastically reshape or even shut down the U.S. Department of Education. What does this department actually do for students and their families? Join our multidisciplinary panel of faculty experts who will discuss the history of the Department of Education; its various responsibilities (such as administering funds to support students from low-income families, administering college grants and student loans, enforcing students' civil rights, and collecting data on educational progress); arguments for shutting the department down; what the nominee for Secretary of Education and the Presidential Administration have said about what would happen to its various programs; and what its dismantling could mean for students, families, universities, and communities going forward.

All are welcome. Register in advance to receive the Zoom link: https://bit.ly/4b7Cn1Q

Robert Bifulco (Moderator)
Professor, Public Administration and International Affairs

Elizabeth Martin
Assistant Professor, Sociology

Michah W. Rothbart
Associate Professor, Public Administration and International Affairs

Sean Drake
Assistant Professor, Sociology

Syracuse University
Maxwell School of Citizenship & Public Affairs
Center for Policy Research

Communication Access Realtime Translation (CART) will be available. Please contact Alyssa Kirk at amkirk@syr.edu for additional accommodations.

https://www.maxwell.syr.edu/research/center-for-policy-research

Program on Educational Equity and Policy

Tips:

- Python **sets**:

  Data structure (like lists, dictionaries, tuples, Series, DataFrames)

  - **Unordered** collection of **unique elements**
  - Support set-theoretic operations

  - Created via set() function or {}:

set1 = set()	Empty set
set2 = set(["Alice", "Bob"])	Set with two elements
set3 = {"Alice", "Bob", "Alice"}	Set with two elements
set4 = {"Chris", "Dora", "Alice"}	Set with three elements

  Gotcha: similar to dictionaries but without the keys

  - Can add and remove elements:

set1.add("Eliza")	set1 👉 {"Eliza"}
set1.update(["Fred","Gretchen"])	set1 👉 {"Eliza", "Fred", "Gretchen"}
set1.remove("Fred")	set1 👉 {"Eliza", "Gretchen"}

- Can test for membership:

in_set = "Alice" in set3	in_set 👉 True
not_in = "Dora" not in set3	not_in 👉 True

- Can do set math:

set5 = set3.union(set4)	set5 👉 {"Alice", "Bob", "Chris", "Dora"}
set6 = set3.intersection(set4)	set6 👉 {"Alice"}
set7 = set3.difference(set4)	set7 👉 {"Bob"}
set8 = set4 - set3	set8 👉 {"Chris", "Dora"}
is_sup = set4.issuperset(set2)	is_sup 👉 True
is_sub = set2.issubset(set4)	is_sub 👉 True

- **Key use case**: finding unique elements in a list:

a_list = ['d', 'b', 'a', 'c', 'd', 'b']	
uni = set(a_list)	uni 👉 {'d', 'b', 'a', 'c'}