live02

January 23, 2025

1 Live Coding Session Module 02

1.1 Gallup Poll # 1936-0053

• Teachers' Oath/Government Loans for Farmers/Employers Insurance Contributions/Presidential Candidates [Roper #31087039]

```
[4]: import pandas as pd
     import numpy as np
[5]:
     gallup = pd.read_csv('data/USAIP01936-0053.csv')
     gallup.head(3).T
[7]:
                                          0
                                                                   1
                                                                      \
     form
                                        NaN
                                                                 NaN
     state
                                    Indiana
                                                            Illinois
                               East Central
     region
                                                       East Central
                                       Male
     female
                                                                Male
                                        NaN
                                                                 NaN
     age
     class
                                        Av+
                                                                 Av+
     OCCUPATION1
                           Skilled workers
                                                    Skilled workers
     OCCUPATION2
                                        NaN
                                                                 NaN
     OCCUPATION3
                                        NaN
                                                                 NaN
     black
                                        NaN
                                                                 NaN
     size
                                      Urban
                                                               Urban
     education
                                        NaN
                                                                 NaN
     AGE 3WAY
                                        NaN
                                                                 NaN
     AGE40
                                        NaN
                                                                 NaN
     OCC8
                                      Labor
                                                               Labor
                                                   Not Professional
     prof
                          Not Professional
     REGION4
                                    Midwest
                                                             Midwest
     EDU_RECODE
                                        NaN
                                                                 NaN
     VOTE_PRO
                                     Landon
                                                              Landon
     VOTE_RETRO
                                     Hoover
                                                              Hoover
     PHONE_RECODE
                                        NaN
                                                                 NaN
     CAR_RECODE
                                        NaN
                                                                 NaN
     ballot
                                         53
                                                                  53
```

Q1	Yes	Yes
Q2	Yes	NaN
Q3	Yes	Yes
Q4A	Roosevelt	Landon
Q4B	Roosevelt	Landon
Q4C	Landon	Landon
Q5A	Landon	Landon
Q5B	Yes, voted for Hoover	Yes, voted for Hoover
farm	Non-Farm	Non-Farm
SIZE3	Urban	Urban
urban	Urban	Urban
StPOAbrv	in	il
SOUTH11	Non-South	Non-South
SOUTH11xBLACK	NaN	NaN
SOUTH12	Non-South	Non-South
SOUTH12xBLACK	NaN	NaN
south	Non-South	Non-South
SOUTHxBLACK	NaN	NaN
year	1936	1936
WtPubFeas	NaN	NaN
WtVotFeas	NaN	NaN
	0	

2 form ${\tt NaN}$ state Michigan region East Central female Male age ${\tt NaN}$ class Αv OCCUPATION1 Business OCCUPATION2 NaN OCCUPATION3 NaN black NaN Urban size NaN education AGE_3WAY NaN AGE40 NaN OCC8 Professional Professional prof REGION4 Midwest EDU_RECODE NaN VOTE_PRO Landon VOTE_RETRO Hoover PHONE_RECODE NaN CAR_RECODE NaN ballot 53 Q1 No

```
QЗ
                                        Yes
      Q4A
                                     Landon
      Q4B
                                     Landon
      Q4C
                                     Landon
                                     Landon
      Q5A
      Q5B
                     Yes, voted for Hoover
      farm
                                   Non-Farm
      SIZE3
                                      Urban
      urban
                                      Urban
      StPOAbrv
                                         mi
      SOUTH11
                                  Non-South
      SOUTH11xBLACK
                                        NaN
      SOUTH12
                                  Non-South
      SOUTH12xBLACK
                                        NaN
      south
                                  Non-South
      SOUTHxBLACK
                                        NaN
      vear
                                       1936
      WtPubFeas
                                        NaN
      WtVotFeas
                                        NaN
 [9]: pd.crosstab(gallup['Q3'],gallup['Q5A'])
 [9]: Q5A Landon Lemke Other party Roosevelt Thomas
      QЗ
      No
              921
                      41
                                     6
                                              442
                                                        10
              820
                                     6
      Yes
                     109
                                             2048
                                                        41
     1.2 Dataset 2
[11]: russia = pd.read_csv('data/31121191.csv',encoding='latin')
[15]: #pd.set_option('display.max_rows'=63)
      russia.head(3).T
[15]:
                                             0
      TD
                              0791e2f21e4cea8f
      SEX
                                          Male
      AGE
      EDU
               Incomplete secondary education
                   The Trans-Baikal Territory
      REGION
      ss6
      ss7_1
      ss7_2
      ss8
                                      1.466481
      weight1
```

No

Q2

```
ID
                                              0791e3674d8ced7d
      SEX
                                                           Male
      AGE
                                                             47
      EDU
               Secondary special education (technical school)
     REGION
                                 The Primorsky Krai/ Territory
      ss6
      ss7_1
      ss7_2
      ss8
      weight1
                                                       1.249258
      ID
                                              0791e2f9facceb98
      SEX
                                                        Female
      AGE
      EDU
               Secondary special education (technical school)
      REGION
                                 The Primorsky Krai/ Territory
      ss6
      ss7_1
      ss7 2
      ss8
                                                       1.658539
      weight1
      [62 rows x 3 columns]
[17]: russia['Q2_1'].value_counts()
[17]: Q2_1
      Approve
                     37597
      Disapprove
                      6818
      Do not know
                      3768
      Name: count, dtype: int64
     1.3 Third Dataset: Pakistan
[28]: widthsd = pd.read_csv('data/USIA data widths.csv')
      widthsd
[28]:
           Field Width
      0
               1
                      4
               2
                      3
      1
               3
      2
                      1
      3
               4
                      1
```

1 \

```
4
                 5
                          1
       . .
                          2
       131
               132
       132
               133
                          1
       133
               134
                          1
       134
               135
                          1
       135
                          1
               136
       [136 rows x 2 columns]
[29]: usia = pd.read_fwf('data/i20068.dat', widths=widthsd['Width'], header=None)
       usia.head(3).T
[29]:
                                  2
                 0
                          1
       0
                 1
                          2
                                  3
       1
             155.0
                    155.0
                             155.0
       2
               2.0
                       2.0
                                2.0
               1.0
       3
                       1.0
                                1.0
       4
               2.0
                       2.0
                                2.0
               4.0
                       {\tt NaN}
                                {\tt NaN}
       131
                                NaN
       132
               {\tt NaN}
                       {\tt NaN}
       133
               6.0
                       {\tt NaN}
                                NaN
```

[136 rows x 3 columns]

3.0

NaN

5.0

NaN

4.0

 ${\tt NaN}$

[]:

134

135