**Help for Final Exam II take home portion**

**Your df will look something like Out[1] below.**

**I have created the column\_label and list\_to\_drop. Please scroll down past Out[1] and see Out [2] and Out[3]**

**In[1]: df**

**Out[1]:**

0 1 2 3 4 ... 39 40 41 42 43

0 13904 20110101 53 12 OVC045 ... 29.95

1 13904 20110101 153 12 OVC049 ... 30.02

2 13904 20110101 253 12 OVC060 ... 30.02

3 13904 20110101 353 12 OVC065 ... 30.04

4 13904 20110101 453 12 BKN070 ... 30.04

5 13904 20110101 553 12 BKN065 ... 30.06

6 13904 20110101 653 12 BKN065 ... 30.10

7 13904 20110101 753 12 SCT060 ... 30.12

8 13904 20110101 853 12 FEW060 ... 30.16

9 13904 20110101 953 12 FEW060 ... 30.19

10 13904 20110101 1053 12 FEW060 ... 30.20

11 13904 20110101 1153 12 FEW060 ... 30.20

12 13904 20110101 1253 12 FEW250 ... 30.18

13 13904 20110101 1353 12 CLR ... 30.17

14 13904 20110101 1453 12 CLR ... 30.17

15 13904 20110101 1553 12 CLR ... 30.17

16 13904 20110101 1653 12 CLR ... 30.18

17 13904 20110101 1753 12 CLR ... 30.20

18 13904 20110101 1853 12 CLR ... 30.23

19 13904 20110101 1953 12 CLR ... 30.26

20 13904 20110101 2053 12 CLR ... 30.28

21 13904 20110101 2153 12 CLR ... 30.30

22 13904 20110101 2253 12 CLR ... 30.31

23 13904 20110101 2353 12 CLR ... 30.32

24 13904 20110102 53 12 CLR ... 30.32

25 13904 20110102 153 12 CLR ... 30.33

26 13904 20110102 253 12 CLR ... 30.35

27 13904 20110102 353 12 CLR ... 30.35

28 13904 20110102 453 12 CLR ... 30.34

29 13904 20110102 553 12 CLR ... 30.36

... ... ... ... .. ... ... .. .. .. ... ..

10307 13904 20111230 1853 12 CLR ... 30.04

10308 13904 20111230 1953 12 CLR ... 30.06

10309 13904 20111230 2053 12 CLR ... 30.07

10310 13904 20111230 2153 12 CLR ... 30.07

10311 13904 20111230 2253 12 CLR ... 30.07

10312 13904 20111230 2353 12 CLR ... 30.05

10313 13904 20111231 53 12 CLR ... 30.04

10314 13904 20111231 153 12 CLR ... 30.04

10315 13904 20111231 253 12 CLR ... 30.03

10316 13904 20111231 353 12 CLR ... 30.02

10317 13904 20111231 453 12 CLR ... 30.02

10318 13904 20111231 553 12 CLR ... 30.03

10319 13904 20111231 653 12 FEW010 ... 30.04

10320 13904 20111231 753 12 FEW010 ... 30.05

10321 13904 20111231 853 12 FEW010 ... 30.07

10322 13904 20111231 953 12 FEW010 ... 30.08

10323 13904 20111231 1053 12 FEW010 ... 30.07

10324 13904 20111231 1153 12 FEW250 ... 30.02

10325 13904 20111231 1253 12 FEW250 ... 29.98

10326 13904 20111231 1353 12 FEW250 ... 29.95

10327 13904 20111231 1453 12 FEW250 ... 29.94

10328 13904 20111231 1553 12 FEW250 ... 29.94

10329 13904 20111231 1653 12 FEW250 ... 29.94

10330 13904 20111231 1753 12 FEW250 ... 29.97

10331 13904 20111231 1853 12 CLR ... 30.00

10332 13904 20111231 1953 12 CLR ... 30.02

10333 13904 20111231 2053 12 CLR ... 30.05

10334 13904 20111231 2153 12 CLR ... 30.06

10335 13904 20111231 2253 12 CLR ... 30.09

10336 13904 20111231 2353 12 CLR ... 30.12

[10337 rows x 44 columns]

**In [2]: column\_labels**

**Out[2]:** 'Wban,date,Time,StationType,sky\_condition,sky\_conditionFlag,visibility,visibilityFlag,wx\_and\_obst\_to\_vision,wx\_and\_obst\_to\_visionFlag,dry\_bulb\_faren,dry\_bulb\_farenFlag,dry\_bulb\_cel,dry\_bulb\_celFlag,wet\_bulb\_faren,wet\_bulb\_farenFlag,wet\_bulb\_cel,wet\_bulb\_celFlag,dew\_point\_faren,dew\_point\_farenFlag,dew\_point\_cel,dew\_point\_celFlag,relative\_humidity,relative\_humidityFlag,wind\_speed,wind\_speedFlag,wind\_direction,wind\_directionFlag,value\_for\_wind\_character,value\_for\_wind\_characterFlag,station\_pressure,station\_pressureFlag,pressure\_tendency,pressure\_tendencyFlag,presschange,presschangeFlag,sea\_level\_pressure,sea\_level\_pressureFlag,record\_type,hourly\_precip,hourly\_precipFlag,altimeter,altimeterFlag,junk'

**In [3]: list\_to\_drop**

**Out[3]:**

['sky\_conditionFlag',

'visibilityFlag',

'wx\_and\_obst\_to\_vision',

'wx\_and\_obst\_to\_visionFlag',

'dry\_bulb\_farenFlag',

'dry\_bulb\_celFlag',

'wet\_bulb\_farenFlag',

'wet\_bulb\_celFlag',

'dew\_point\_farenFlag',

'dew\_point\_celFlag',

'relative\_humidityFlag',

'wind\_speedFlag',

'wind\_directionFlag',

'value\_for\_wind\_character',

'value\_for\_wind\_characterFlag',

'station\_pressureFlag',

'pressure\_tendencyFlag',

'pressure\_tendency',

'presschange',

'presschangeFlag',

'sea\_level\_pressureFlag',

'hourly\_precip',

'hourly\_precipFlag',

'altimeter',

'record\_type',

'altimeterFlag',

'junk']

In [3]: column\_labels

Out[3]: 'Wban,date,Time,StationType,sky\_condition,sky\_conditionFlag,visibility,visibilityFlag,wx\_and\_obst\_to\_vision,wx\_and\_obst\_to\_visionFlag,dry\_bulb\_faren,dry\_bulb\_farenFlag,dry\_bulb\_cel,dry\_bulb\_celFlag,wet\_bulb\_faren,wet\_bulb\_farenFlag,wet\_bulb\_cel,wet\_bulb\_celFlag,dew\_point\_faren,dew\_point\_farenFlag,dew\_point\_cel,dew\_point\_celFlag,relative\_humidity,relative\_humidityFlag,wind\_speed,wind\_speedFlag,wind\_direction,wind\_directionFlag,value\_for\_wind\_character,value\_for\_wind\_characterFlag,station\_pressure,station\_pressureFlag,pressure\_tendency,pressure\_tendencyFlag,presschange,presschangeFlag,sea\_level\_pressure,sea\_level\_pressureFlag,record\_type,hourly\_precip,hourly\_precipFlag,altimeter,altimeterFlag,junk'

**In [4]: df\_climate**

**Out[4]:**

Temperature DewPoint Pressure

Date

2010-01-01 00:00:00 46.2 37.5 1.0

2010-01-01 01:00:00 44.6 37.1 1.0

2010-01-01 02:00:00 44.1 36.9 1.0

2010-01-01 03:00:00 43.8 36.9 1.0

2010-01-01 04:00:00 43.5 36.8 1.0

2010-01-01 05:00:00 43.0 36.5 1.0

2010-01-01 06:00:00 43.1 36.3 1.0

2010-01-01 07:00:00 42.3 35.9 1.0

2010-01-01 08:00:00 42.5 36.2 1.0

2010-01-01 09:00:00 45.9 37.8 1.0

2010-01-01 10:00:00 49.4 38.3 1.0

2010-01-01 11:00:00 52.4 38.3 1.0

2010-01-01 12:00:00 54.9 38.2 1.0

2010-01-01 13:00:00 57.1 38.5 1.0

2010-01-01 14:00:00 58.4 38.2 1.0

2010-01-01 15:00:00 59.1 38.3 1.0

2010-01-01 16:00:00 59.1 38.3 1.0

2010-01-01 17:00:00 58.0 38.7 1.0

2010-01-01 18:00:00 54.5 38.2 1.0

2010-01-01 19:00:00 51.3 38.5 1.0

2010-01-01 20:00:00 49.2 38.4 1.0

2010-01-01 21:00:00 48.1 38.5 1.0

2010-01-01 22:00:00 47.2 38.5 1.0

2010-01-01 23:00:00 46.4 38.4 1.0

2010-01-02 00:00:00 46.5 38.2 1.0

2010-01-02 01:00:00 44.9 37.8 1.0

2010-01-02 02:00:00 44.4 37.7 1.0

2010-01-02 03:00:00 44.1 37.6 1.0

2010-01-02 04:00:00 43.9 37.6 1.0

2010-01-02 05:00:00 43.3 37.3 1.0

... ... ... ...

2010-12-30 18:00:00 54.1 37.9 1.0

2010-12-30 19:00:00 50.9 38.2 1.0

2010-12-30 20:00:00 49.0 38.0 1.0

2010-12-30 21:00:00 47.9 38.1 1.0

2010-12-30 22:00:00 46.9 38.0 1.0

2010-12-30 23:00:00 46.1 37.9 1.0

2010-12-31 00:00:00 46.1 37.5 1.0

2010-12-31 01:00:00 44.5 37.2 1.0

2010-12-31 02:00:00 44.1 37.0 1.0

2010-12-31 03:00:00 43.7 36.9 1.0

2010-12-31 04:00:00 43.5 36.8 1.0

2010-12-31 05:00:00 42.9 36.5 1.0

2010-12-31 06:00:00 43.0 36.1 1.0

2010-12-31 07:00:00 42.2 35.7 1.0

2010-12-31 08:00:00 42.5 36.1 1.0

2010-12-31 09:00:00 46.0 37.7 1.0

2010-12-31 10:00:00 49.4 38.0 1.0

2010-12-31 11:00:00 52.4 38.0 1.0

2010-12-31 12:00:00 54.7 37.9 1.0

2010-12-31 13:00:00 56.9 38.2 1.0

2010-12-31 14:00:00 58.2 37.9 1.0

2010-12-31 15:00:00 58.8 37.9 1.0

2010-12-31 16:00:00 58.8 37.9 1.0

2010-12-31 17:00:00 57.6 38.2 1.0

2010-12-31 18:00:00 54.3 37.8 1.0

2010-12-31 19:00:00 51.1 38.1 1.0

2010-12-31 20:00:00 49.0 37.9 1.0

2010-12-31 21:00:00 47.9 37.9 1.0

2010-12-31 22:00:00 46.9 37.9 1.0

2010-12-31 23:00:00 46.2 37.7 1.0

[8759 rows x 3 columns]

**In [5]: df\_clean**

**Out[5]:**

Wban date Time StationType sky\_condition ... relative\_humidity wind\_speed wind\_direction station\_pressure sea\_level\_pressure

2011-01-01 00:53:00 13904 20110101 005300 12 OVC045 ... 24 15.0 360 29.42 29.95

2011-01-01 01:53:00 13904 20110101 015300 12 OVC049 ... 23 10.0 340 29.49 30.01

2011-01-01 02:53:00 13904 20110101 025300 12 OVC060 ... 22 15.0 010 29.49 30.01

2011-01-01 03:53:00 13904 20110101 035300 12 OVC065 ... 27 7.0 350 29.51 30.03

2011-01-01 04:53:00 13904 20110101 045300 12 BKN070 ... 25 11.0 020 29.51 30.04

2011-01-01 05:53:00 13904 20110101 055300 12 BKN065 ... 28 6.0 010 29.53 30.06

2011-01-01 06:53:00 13904 20110101 065300 12 BKN065 ... 29 7.0 360 29.57 30.10

2011-01-01 07:53:00 13904 20110101 075300 12 SCT060 ... 29 11.0 020 29.59 30.12

2011-01-01 08:53:00 13904 20110101 085300 12 FEW060 ... 25 15.0 020 29.62 30.16

2011-01-01 09:53:00 13904 20110101 095300 12 FEW060 ... 22 18.0 010 29.65 30.19

2011-01-01 10:53:00 13904 20110101 105300 12 FEW060 ... 22 15.0 030 29.66 30.20

2011-01-01 11:53:00 13904 20110101 115300 12 FEW060 ... 23 14.0 010 29.66 30.20

2011-01-01 12:53:00 13904 20110101 125300 12 FEW250 ... 24 14.0 020 29.65 30.18

2011-01-01 13:53:00 13904 20110101 135300 12 CLR ... 28 14.0 010 29.63 30.16

2011-01-01 14:53:00 13904 20110101 145300 12 CLR ... 29 16.0 360 29.63 30.16

2011-01-01 15:53:00 13904 20110101 155300 12 CLR ... 32 11.0 350 29.63 30.17

2011-01-01 16:53:00 13904 20110101 165300 12 CLR ... 34 13.0 040 29.65 30.18

2011-01-01 17:53:00 13904 20110101 175300 12 CLR ... 39 10.0 040 29.66 30.21

2011-01-01 18:53:00 13904 20110101 185300 12 CLR ... 48 9.0 040 29.69 30.24

2011-01-01 19:53:00 13904 20110101 195300 12 CLR ... 46 11.0 040 29.72 30.27

2011-01-01 20:53:00 13904 20110101 205300 12 CLR ... 51 8.0 040 29.74 30.29

2011-01-01 21:53:00 13904 20110101 215300 12 CLR ... 53 7.0 050 29.76 30.30

2011-01-01 22:53:00 13904 20110101 225300 12 CLR ... 53 6.0 030 29.77 30.32

2011-01-01 23:53:00 13904 20110101 235300 12 CLR ... 50 3.0 050 29.78 30.33

2011-01-02 00:53:00 13904 20110102 005300 12 CLR ... 69 6.0 340 29.78 30.33

2011-01-02 01:53:00 13904 20110102 015300 12 CLR ... 69 8.0 350 29.79 30.34

2011-01-02 02:53:00 13904 20110102 025300 12 CLR ... 72 5.0 360 29.81 30.36

2011-01-02 03:53:00 13904 20110102 035300 12 CLR ... 75 8.0 350 29.81 30.36

2011-01-02 04:53:00 13904 20110102 045300 12 CLR ... 69 5.0 360 29.80 30.36

2011-01-02 05:53:00 13904 20110102 055300 12 CLR ... 69 5.0 010 29.82 30.38

... ... ... ... ... ... ... ... ... ... ... ...

2011-12-30 18:53:00 13904 20111230 185300 12 CLR ... 46 10.0 040 29.51 30.04

2011-12-30 19:53:00 13904 20111230 195300 12 CLR ... 71 0.0 000 29.53 30.07

2011-12-30 20:53:00 13904 20111230 205300 12 CLR ... 71 3.0 340 29.54 30.07

2011-12-30 21:53:00 13904 20111230 215300 12 CLR ... 77 0.0 000 29.54 30.07

2011-12-30 22:53:00 13904 20111230 225300 12 CLR ... 83 0.0 000 29.54 30.06

2011-12-30 23:53:00 13904 20111230 235300 12 CLR ... 89 0.0 000 29.52 30.05

2011-12-31 00:53:00 13904 20111231 005300 12 CLR ... 80 3.0 280 29.51 30.04

2011-12-31 01:53:00 13904 20111231 015300 12 CLR ... 77 6.0 280 29.51 30.03

2011-12-31 02:53:00 13904 20111231 025300 12 CLR ... 93 0.0 000 29.50 30.02

2011-12-31 03:53:00 13904 20111231 035300 12 CLR ... 89 0.0 000 29.49 30.02

2011-12-31 04:53:00 13904 20111231 045300 12 CLR ... 89 0.0 000 29.49 30.02

2011-12-31 05:53:00 13904 20111231 055300 12 CLR ... 82 0.0 000 29.50 30.03

2011-12-31 06:53:00 13904 20111231 065300 12 FEW010 ... 92 5.0 270 29.51 30.04

2011-12-31 07:53:00 13904 20111231 075300 12 FEW010 ... 93 0.0 000 29.52 30.07

2011-12-31 08:53:00 13904 20111231 085300 12 FEW010 ... 71 0.0 000 29.54 30.08

2011-12-31 09:53:00 13904 20111231 095300 12 FEW010 ... 57 0.0 000 29.54 30.09

2011-12-31 10:53:00 13904 20111231 105300 12 FEW010 ... 50 7.0 190 29.54 30.06

2011-12-31 11:53:00 13904 20111231 115300 12 FEW250 ... 44 13.0 210 29.49 30.02

2011-12-31 12:53:00 13904 20111231 125300 12 FEW250 ... 38 13.0 200 29.45 29.97

2011-12-31 13:53:00 13904 20111231 135300 12 FEW250 ... 39 15.0 200 29.42 29.94

2011-12-31 14:53:00 13904 20111231 145300 12 FEW250 ... 35 13.0 210 29.41 29.93

2011-12-31 15:53:00 13904 20111231 155300 12 FEW250 ... 40 16.0 200 29.41 29.93

2011-12-31 16:53:00 13904 20111231 165300 12 FEW250 ... 40 13.0 190 29.41 29.93

2011-12-31 17:53:00 13904 20111231 175300 12 FEW250 ... 52 8.0 190 29.44 29.97

2011-12-31 18:53:00 13904 20111231 185300 12 CLR ... 69 7.0 190 29.47 30.01

2011-12-31 19:53:00 13904 20111231 195300 12 CLR ... 69 5.0 200 29.49 30.03

2011-12-31 20:53:00 13904 20111231 205300 12 CLR ... 80 0.0 000 29.52 30.05

2011-12-31 21:53:00 13904 20111231 215300 12 CLR ... 80 0.0 000 29.53 30.06

2011-12-31 22:53:00 13904 20111231 225300 12 CLR ... 83 3.0 150 29.56 30.09

2011-12-31 23:53:00 13904 20111231 235300 12 CLR ... 93 3.0 260 29.59 30.11

[10337 rows x 17 columns]