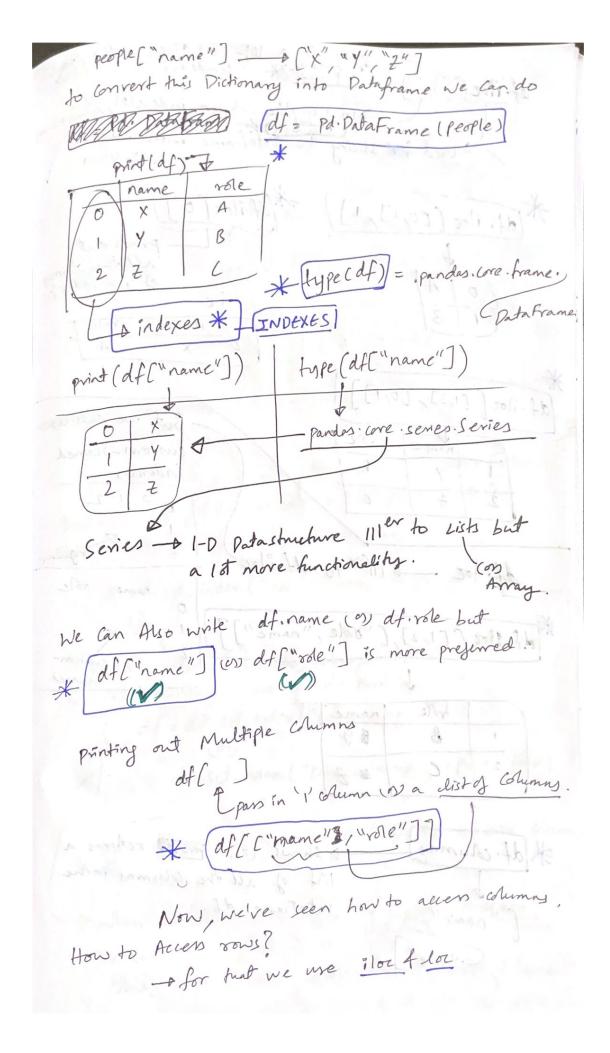
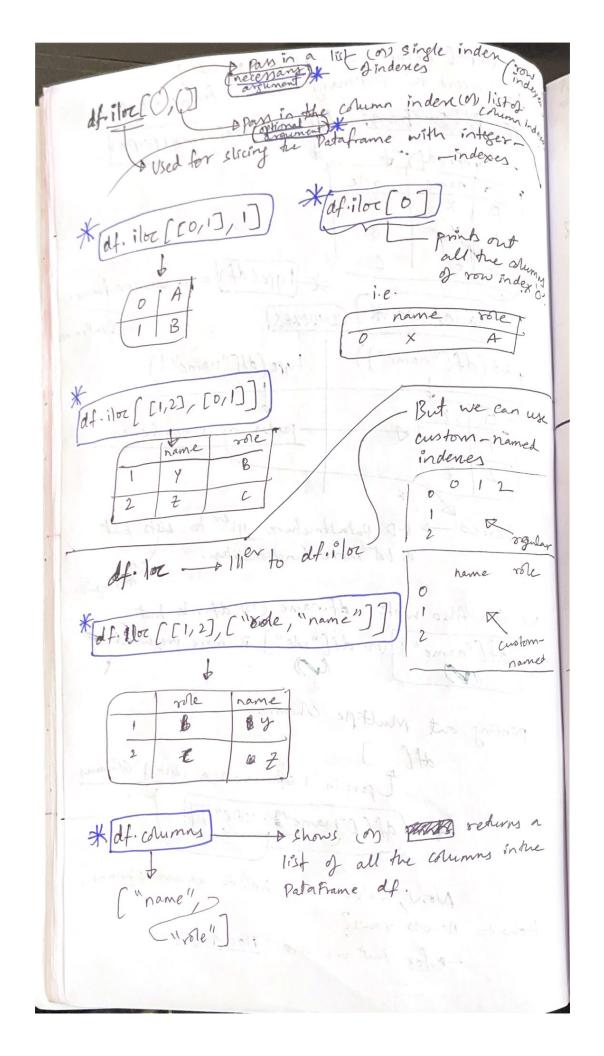
Pandas Python 20 4 23 1 (from corey schafer) used to read tabular data. Introduction General Convention import Pandas as pd of importing * df = pd. read - SV (path / to / file. tnt') wead intopeale * of (short for paraframe). Print he file. A df. shape were columns x rows of the file information of all the datatypes to the columns along with the shape of the data frame df.info() * datatypes - int 64, hoat 64, Object L string type. esenwally) (Dome of Em) pd. Set-option ('display, man-columny', 36) * pd. set-option (display, man-rows , 20) a man of a man 36 columns of 20 rows. is displayed is displayed. of head () - o get first 5 rows. * of head (7) - set first 7 rows. df. fail() - o get that lost srows. df fail (7) - o get the last 7 rows. Dataframe & Series Patatypes Dataframe - 2-D Patastructure. Dataframe is Iller to a Dictionary en people = { "name": ["x" "y" "Z"]
2" vole": ["A", "6", "2"]





We can Also use string df. lot [[0,12], ["name" rae"] can be written as LA /df. loz [0:2, "name": "role"] df.iloc (0:2, 0:1) * While String in pandes * Both are inclusive we change has inter (V gandas - + 0:2 - + 0,1,2 generally -00:2 -00,1 Indexes We can set a column to act as a Index (Also Anderes need not be unique according to pandas) we can do it by * df. set_inden("column_name") But this does not actually change of to set inden as column-name, we can do that by df = df. set_index ("(dumn_nome")) of set-inden ("column-name", inplace = True). offinder - shows or displays the index dum. of the PataFrame of. I When we do his we asetting custom indenes the use of this feature is Imagine we have fields like "name" f "emeil" we have unique emails then that can act as a field

=) we do , df= df.set-index ("email"), A we can Rearch based on email using * df.loc (" johndoe @gmail.com") the enail "johndoe Regnail con! he same of shift. * Note me carnot use the loc[0] once we change the indexes Dince indenes 0,1,... do not enist since we charged it we can still use iloc[o] & sty We can reset indenes by doing * of = df. reset_index() df. rest-inden (inflace = True) Now, all the integer indexes are restored. We Can use * schema - df : sort_inden() Lo sorts all the inden (in Panders) where he changes df. shafe, df. index, df. columns.

If for I df. ilor return the smaller Pataframes must to the values we put in them. The rehund Detaframes are of the type to fandas cre frame Data Frame Dame as all the Pataframe. (A new sub- Pataframe & is returned) of the original Filtering (18) ms I for (81) Consider Pataframe Name | last | email Poe johndoe@gnailion John Jane | Poe | Jaredoe & gnail com James Brad James B. Egmail. Com. Jennifer Anniston Jennifer Anniston & grad Com. * We use conditionals such as ==', f', 'I' to filter our Patafrane. -> (df["last"] == "Doe") -> filt A this will return a Series of True/false (Array) values [True, True, False, False] adf[(True, True, False, False]] - + df [filt] will give indenes 0,1 +it is a (sub-PataFrame to the original DF (it is filtered.) we can do postesse df. loc [filt] instead * (df. 102 Processos the Arrange T/F values) - odf-loc[filt, ["Name", "email"]] to get only Name + email fields.

Using Conditionals. * * And 1' and) filt= (df["last"] == "Doe") & (dfe"name"]==" df. loc[filt] Illust we use I for or We can also use ' > / (<) '>= ', <= ' for - filtering. - Ad. lockhigh-salary, ["Country, " prog-lang" Now let's say we want to see if the "Country" is in a set of our preferred Countries _o countries= ["UIA", "UX", "India", "Germany", "Canada" 18 we use ["isin()" function to check if 184hon-pandas hin!) "country" is in the array. - A filt 1 = df["(ountry"], is in (countries) Now let's say we want to see how many use "python" in their work. Consider approgranges format as (HTML, CSS; Java; We use a python-pandas funcy ("str. Contains() to check if substring is present inside a main string.

we need to put a additional parameter (na = False) to deal with NaN values in the PataFrame. OK (Nullon None) NaN= None = NULL Transcally NULL Pardas Pataframe. filt 2 = df [" prog lang"]. str. contains (" python", na = False) of loc (filt2). [filtering is one of the first]
things we do with Deta y might for for each (HII fam) king & I want on (teller, men) pair for each teller -: hoda nimethor in ((mm , s ettar) I I sage til pun (12 d) (a)) (a)) (a) (a)