

To extract bottom records.

`d3.tail()`

`d2` → var-name

`d3.sample(6)` → To extract random function.

`d2.columns` → To know the column names.

`d2.dtypes` → column names with data types.

`d2.isna().sum` → To know how many null values.

<09/10/2025, Thursday>.

`d2.info()`

* var-name.col-name [`d2.manufactures`]

It is in series format means having either single row or column.

* To get in dataframe format, which include column name also.

`d2[['colname']]`

`d2[['col-name1', 'col-name2', 'col-name3']]`

↳ To extract one or more columns.

To create a series data manually

1) `pd.Series([1, 2, 3, 4])`

2) `S = {'id': [1, 2, 3, 4], 'name': ['Hardu', 'midhun', 'viji', 'bekehu'], 'sal': ['50k', '20k', '40k', '30k']}`

`S`

3) To print in dataframe format.

`data = pd.DataFrame(S)`

`data`

Accessing a particular range of columns.

If i want to extract all columns except one column means, i'll go with delete that one col temporarily.

Ex: `d2.drop('col-name', axis = 1)`

(01) `d2.iloc[:, :-1]`

(01) `d2.loc[:, 'manufa/col-name from': 'col-name upto']`

To permanently delete the features means, assigning to the same variable.

`d2 = d2.drop(['wt', 'hp'], axis = 1)`

`d2`

To delete particular rows.

`d2 = d2.drop([1, 3])`

`d2`

<iloc, loc dataframe slicing>

`var.iloc[row pos, col pos]`

`var.iloc[row start val:row stop val:row inc/dec, col start val:
col stop val: col inc/dec]`

1) WAPT fetch all the rows with first 5 columns.

`d2.iloc[:, :5]`

2) print entire table using iloc

`d2.iloc[:, :]`

3) odd indexed rows with even indexed columns.

`d2.iloc[1::2, ::2]`