

Data Visualisation 1

Categorical: Platform, Genre

Continuous: (sales, global-sales...) Rank

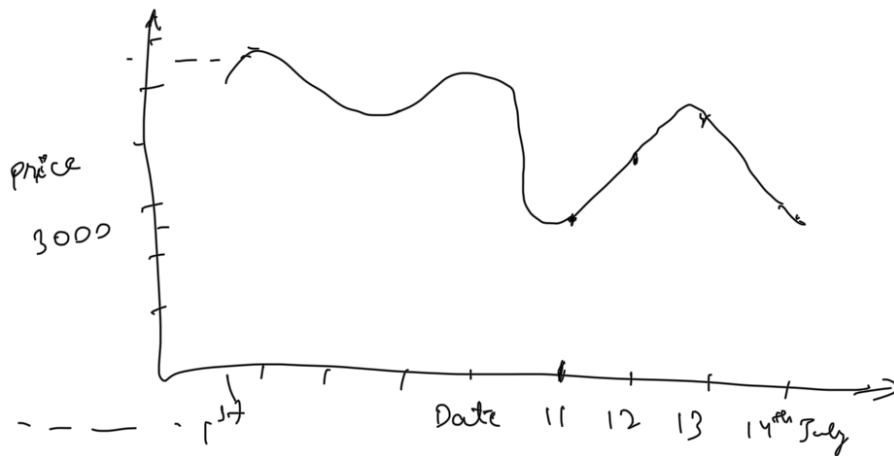
Nominal (Platform, Genre) (You can't order diff. possible values)

Ordinal (star rating; (low, medium, high, very high))

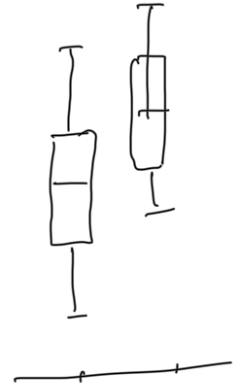
1 2 3 4

TCS

LTP



S1



S2

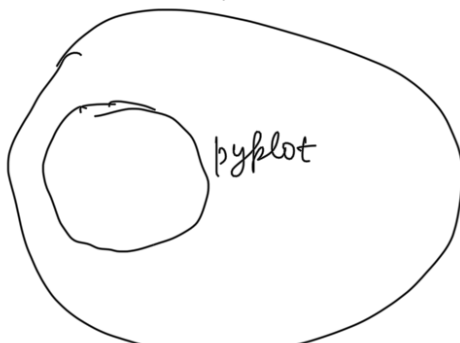
Date	time	Price
14th	5min	



Matplotlib

Matplotlib = library

matplotlib.pyplot



How to decide which graph we want.

(1) How many variables

variables = 1 \Rightarrow Univariate Analysis

variables = 2 Bi-variate Analysis

variables = 3 or more Multi-variate Analysis

Univariate Analysis

(1) Numerical

(2) Categorical

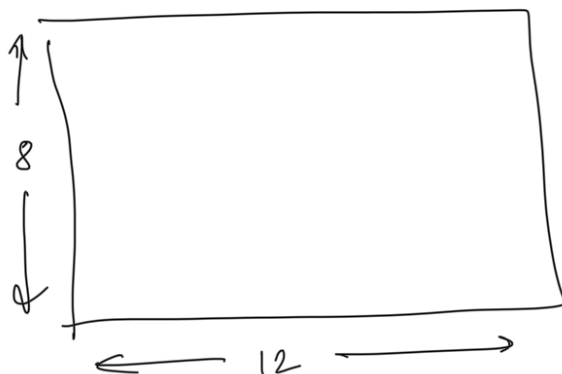
Bivariate Analysis:

(1) $\begin{matrix} N & C \\ v_1 & v_2 \end{matrix}$

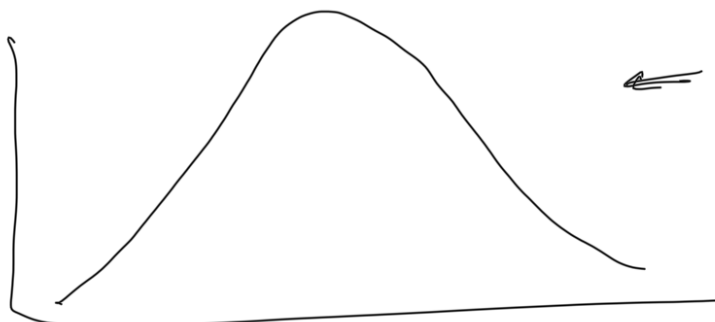
(2) $\begin{matrix} C & C \\ v_1 & v_2 \end{matrix}$

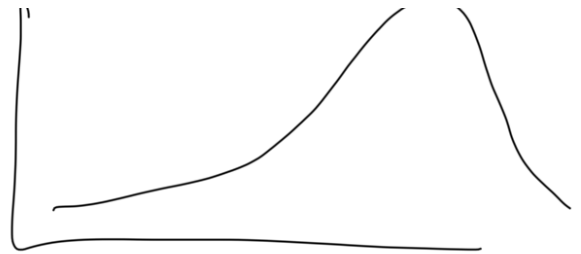
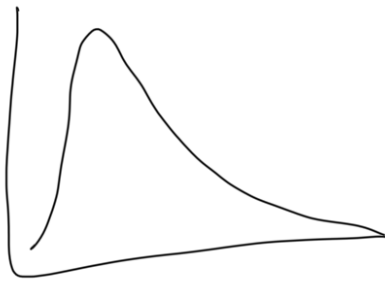
(3) $\begin{matrix} N & N \\ v_1 & v_2 \end{matrix}$

Univariate / Categorical

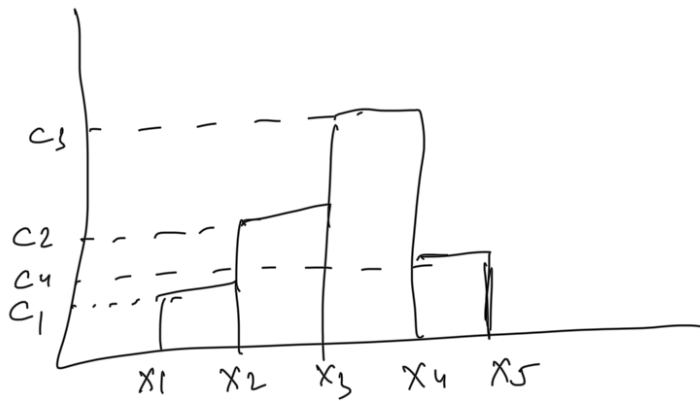


Histogram -





Barplot:



bins = 4

`plt.hist(data["year"],
bins=4)`

count:

`array([c1, c2, c3, c4])`

bins

`array([x1, x2, x3, x4, x5])`

count-

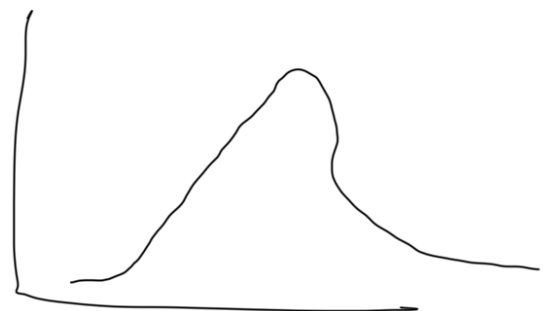
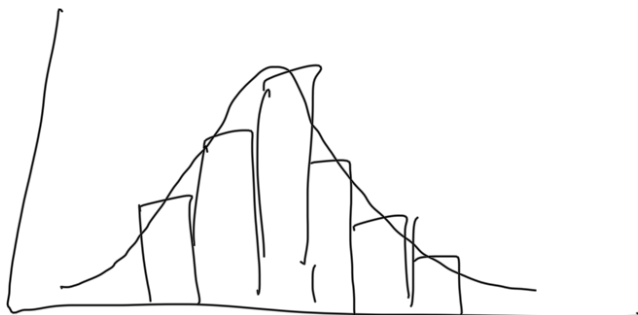
bin 1: $x_1 - x_2 = c_1$

2: $x_2 - x_3 = c_2$

3: $x_3 - x_4 = c_3$

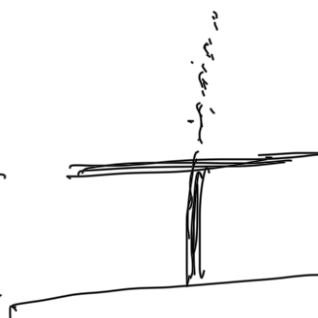
4: $x_4 - x_5 = c_4$

KDE



Box Plot

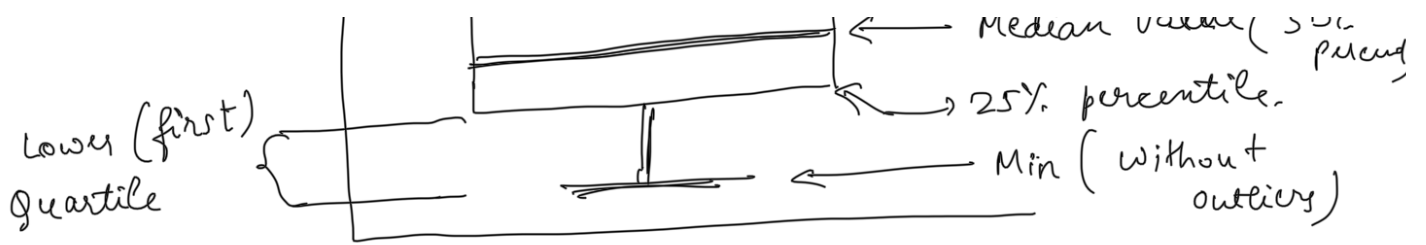
(Max - 75%)
Upper (third)
Quartile



Max (without outlier)

75% Percentile

Min (without outlier)



Min \Rightarrow 25%

Max (100%)

