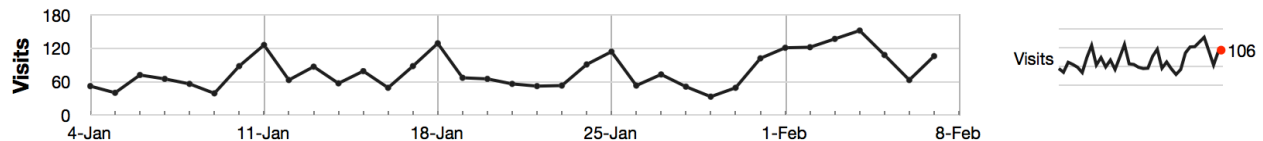


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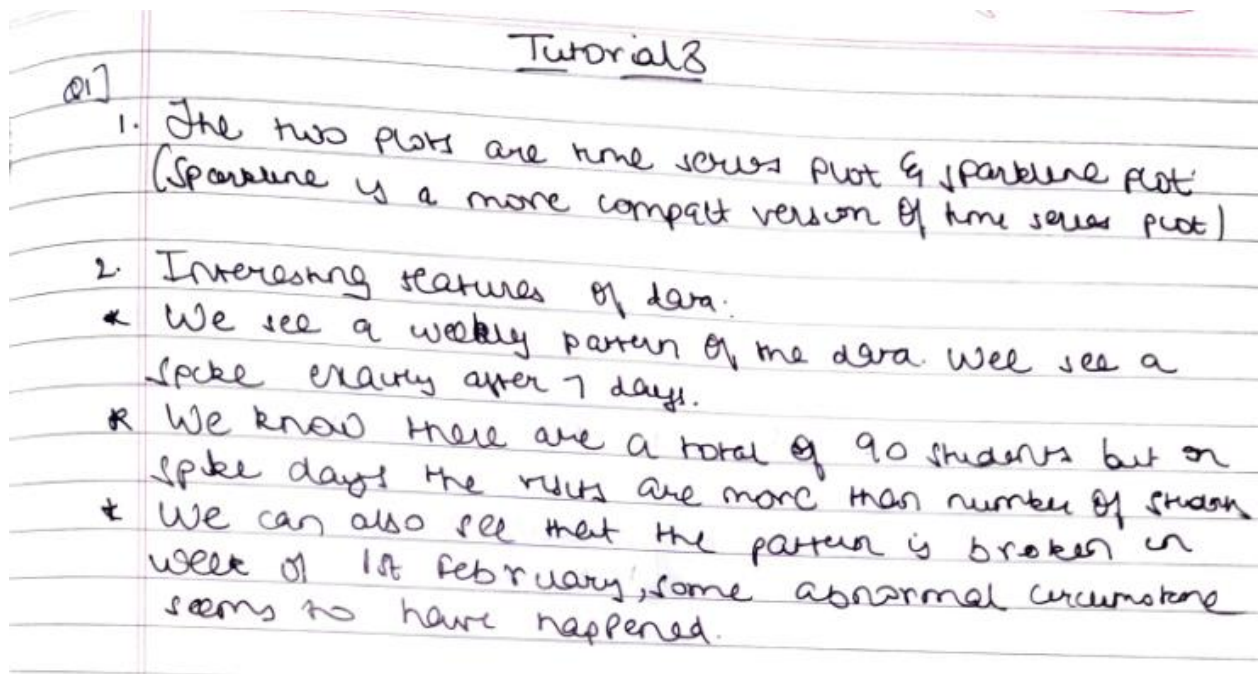
Tut 8: Information Visualization

Question 1

The data shown here are the number of visits to a university website for a particular statistics course. There are 90 students in the class.



1. What are the names (type) of the 2 plots shown?
2. List any 2 interesting features in these data.



Question 2

What are the names of the axes on a bar plot?

Q2] Typically a barplot has a category axis (x axis) and a vertical axis (y axis).

Question 3

Which types of features can the human eye easily pick out of a time series plot?

Q3] Normally humans can detect patterns in data. They can see if there are any change in pattern. We can assess an overall upward or downward trend. We can also detect difference in density of data. We can detect gaps in data.

Question 4

Why is the principle of minimizing "data ink" so important in an effective visualization? Give an scientific or engineering example of why this important.

Q4] Data Ink ratio is the ratio of pixels used to represent the data to the total number of pixels in the entire display. Minimizing data ink would require number of pixels used for representation. We can say that lesser pixels means lesser information to process while visualising.

Question 5

Describe what the main difference(s) between a bar chart and a histogram are.

Q5] Bar chart

→ Used to compare variables

→ Categorical Data

→ Can be reordered

→ Bars may have spaces

Histogram

Used to show distribution of variables

Quantitative Data (binned)

cannot be reordered.

Because of continuity of data
there are no spaces.