Chapter 6. Descriptive Statistics (Part 2)

FPT. Education

FPT UNIVERSITY

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6.4 Box plot

The box plot is a graphical display that simultaneously describes several important features of a data set, such as center, spread, departure from symmetry, and identification of unusual observations or outliers.
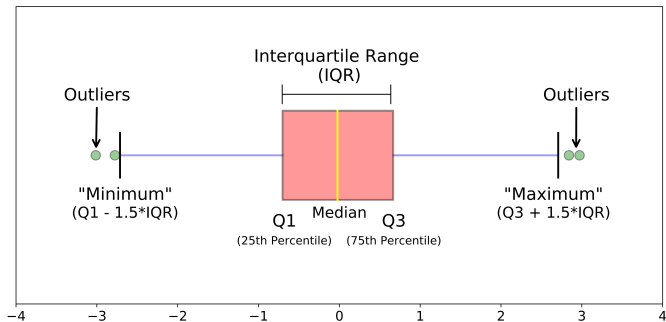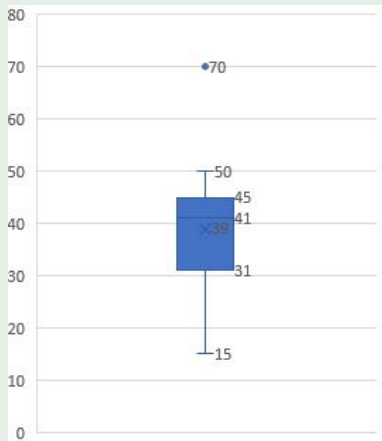
Example

Given a data of ages of 14 random adults from a village

$$15, 20, 31, 31, 32, 40, 41,$$
$$41, 42, 43, 45, 45, 50, 70$$

Draw a box plot for this data.

Median	41
Q1	31
Q3	45
IQR	14
Outlier	70

6.5 Times sequence plots

A time series plot is a graph in which the vertical axis denotes the observed value of the variable (say, x) and the horizontal axis denotes the time (which could be minutes, days, years, etc.)

Years	Annual salary
2005	20614
2006	21175
2007	24766
2008	28100
2009	30189
2010	24618
2011	22006
2012	30912
2013	32523
2014	35285

Time series