

# BOXPLOTS APPLICATIONS MEDIAN HOUSE PRICES



SUBURB	MEDIAN PRICES OF HOUSES SOLD IN LAST MONTH (\$)
SEAVIEW	400000, 500000, 650000, 550000, 525000, 450000, 475000, 475000, 500000, 600000, 550000
TREEVIEW	350000, 275000, 550000, 450000, 325000, 350000, 450000, 375000, 300000, 300000, 450000, 300000, 350000, 450000, 315000
CITYVIEW	850000, 1000000, 950000, 1200000, 925000, 900000, 1000000

Q1. For each suburb:

- (a) draw a table with 3 columns showing the house prices ( $x$ ), the frequency ( $f$ ) and the cumulative frequency (c.f.).
- (b) draw an ogive (cumulative frequency table).
- (c) find the lower quartile, the upper quartile and the median.
- (d) find the interquartile range.

Q2. Using the data of the 3 suburbs, draw 3 parallel box-and-whisker plots (each with the minimum price, the lower quartile, the median, the upper quartile and the maximum price). Use a scale from \$400 000 to \$1200 000.

# ANSWERS

SUBURB	SEAVIEW	TREEVIEW	CITYVIEW
MINIMUM PRICE	400 000	275 000	850 000
LOWER QUARTILE	475 000	300 000	900 000
MEDIAN	500 000	350 000	950 000
UPPER QUARTILE	550 000	450 000	1000 000
MAXIMUM PRICE	650 000	550 000	1200 000
INTER-QUARTILE RANGE	75 000	150 000	100 000