2. In 1798, the British scientist Henry Cavendish measured the density of the earth by careful work with a torsion balance. The variable recorded was the density of the earth as a multiple of the density of water (taken as 1). Cavendish's 29 measurements (y_j) were:

5.50	5.61	4.88	4.07	5.26	5.55	5.36	5.29	5.58	5.65
5.57	5.53	5.62	5.29	5.44	5.34	5.79	5.10	5.27	5.39
5.42	5.47	5.63	5.34	5.46	5.30	5.75	5.86	5.85;	

MARKS

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(2, 3, 2)

for these data: $\sum_{j=1}^{n} y_j = 157.17$; $\sum_{j=1}^{n} y_j^2 = 855.0227$; $n = 29$.

(a) Construct a stemplot (with *ordered* leaves) of these data.

(b) On the basis of your stemplot, comment briefly on the main feature(s) of the distribution.

(c) What is your estimate of the density of the earth based on these measurements? Justify your answer briefly.

(a)

(b)

(c)

(c)

Density estimate