Question 4 [15 marks] Consumption and Cars Even though automobiles are becoming more fuel-efficient, the cost of gasoline is still taking a huge chunk of our personal income. According to GasBuddy, the mean amount spent on gasoline in 2018 was $1900. A random sample of U.S. households was obtained, and each was asked for the amount (in dollars) spent on gasoline during the last year. Is there any evidence to suggest that the data are from a non-normal distribution?

Note: use the **four** methods describe in the lecture. Show **all your work** in order to get full marks for each method. Marks will be distributed as follows:

1. **[3 marks]** Method1 – Graphs
2. **[3 marks]** Method2 – Empirical Rule
3. **[3 marks]** Method3 – IQR/s
4. **[4 marks]** Method4 – Normal Probability Plot
5. **[2 marks]** Conclusion based on the four methods

Amount spent (dollars)		
1819	1841	1959
1898	1923	2016
1849	1980	1838
1809	1848	1901
1908	1811	1933
1882	1873	1868
1935	2017	1882
1943	1892	1958
1914	1770	1750
1834	1955	1794