Practical 1

a) Present the given data using appropriate class interval.
b) Present the given data using the class interval of size 10.
c) Present the given data using all possible descriptive statistics. (Calculate all possible statistics for given data.)
d) Present the given data using bar diagram, pie chart, frequency curve, frequency polygon and histogram.
e) Locate median and mode graphically.
f) Present the given data using Box and whisker plot and stem and leaf method.
g) which of two gender is more consistent and compare the nature of data for both genders.
h) Present cross tabulation of gender and frequency distribution of the weight in terms of frequency, proportion and present in multiple bar diagram, frequency curve and frequency polygon.

weight	gender
30	1
55	1
94	1
77	1
74	2
52	1
46	1
47	1
47	2
33	2
70	1
56	1
62	1
89	2
49	1
10	1
23	1
12	1
91	2
23	2
55	1
22	1
15	2
39	1
22	2
26	1
47	2
88	2
39	1
62	2

47	2
31	2
47	2
47	2
30	1
18	2
47	1
42	2
65	1
35	1
47	2
67	1
43	2
94	2
47	1
67	2
20	2
81	2
77	2
52	1
75	1
70	2
66	2
68	2
93	1
92	2
91	1
30	1
41	1
71	1

Practical 2 (use SPSS only)

Calculate all possible descriptive statistics for the frequency distributions from practical no 1a, 1b, and 1h and compare results. Why they are different? Plot box and whisker plot for both genders related to weight and compare. Also present the distribution of both genders using pie chart.

Practical 3 (use SPSS only)

One of the major measures of the quality of service provided by an organization is the speed with which it responds to customer complaints. An internet service provider, had undergone a major improvement by recruiting well trained installation crews, supervisors and office staffs. The business objective of the company was to reduce the time between when the complaint it received and when it is resolved. During a recent month, the company received 50 complaints concerning internet installation. The data from the 50 complaints, collected by ISP, represent the number of hours between the receipt and the resolution of the complaint:

a. Compute the mean, median, first quartile, and third quartile.

b. Compute the range, interquartile range, variance, standard deviation, and coefficient of variation.

c. Construct a boxplot. Are the data skewed? If so, how?

d. On the basis of the results of (a) through (c), if you had to tell the president of the company how long a customer should expect to wait to have a complaint resolved, what would you say? Explain.

27, 4, 52, 30, 22, 36, 26, 20, 23, 33, 68, 165, 32, 29, 28, 29, 26, 25, 1, 14, 13, 13, 10, 5, 19, 126, 110, 110, 29, 61, 35, 94, 31, 26, 5, 12, 4, 54, 5, 35, 137, 31, 27, 152, 2, 123, 81, 74, 27, 11