Answer 3:

STRING BMI\_Status (A8).

RECODE BMI (Lowest thru 18.5='Underweight') (18.5 thru 24.9='Healthy') (25 thru 29.9='Overweight')

(30 thru Highest='Obese') INTO BMI\_Status.

Warning # 4684 in column 36. Text: BMI\_Status

On the RECODE command, the list of variables following the keyword INTO

includes a string variable which is not of sufficient width to accept the

longest string value generated by the value specifications. Long values will

be truncated to the length of the variables.

VARIABLE LABELS BMI\_Status 'BMI Status'.

EXECUTE.

Answer 4:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Descriptive Statistics** | | | | | | | |
|  | N | Minimum | Maximum | Mean | Std. Deviation | Skewness | |
| Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error |
| Body Mass Index | 55 | 17.09 | 37.62 | 24.7191 | 3.96456 | .860 | .322 |
| Weight (kg) | 55 | 43.65 | 96.75 | 70.5284 | 13.26490 | .190 | .322 |
| Valid N (listwise) | 55 |  |  |  |  |  |  |

The number of observations is 55 for both Body Mass Index (BMI) and Weight and there is no missing value. The mean of BMI and Weight is 24.7191 and 13.2649, respectively.

The skewness statistics value of BMI and Weight variable is 0.860 and 0.190, respectively, which indicates that both the variables are moderately skewed. In other words, the BMI and Weight variable follows normal distribution as shown below figure.

Chart, histogram

Description automatically generatedChart, histogram

Description automatically generated

Answer 5:

The mean, median, and standard deviation of weight is 70.53, 67.50, and 13.26, respectively.

For “Weight Variable”

|  |  |  |
| --- | --- | --- |
| **Statistics** | | |
| Weight (kg) | | |
| N | Valid | 55 |
| Missing | 0 |
| Mean | | 70.5284 |
| Median | | 67.5000 |
| Mode | | 67.50a |
| Std. Deviation | | 13.26490 |
| a. Multiple modes exist. The smallest value is shown | | |

For all Cases:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Weight (kg)** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 43.65 | 1 | 1.8 | 1.8 | 1.8 |
| 49.05 | 1 | 1.8 | 1.8 | 3.6 |
| 49.50 | 1 | 1.8 | 1.8 | 5.5 |
| 53.10 | 1 | 1.8 | 1.8 | 7.3 |
| 53.55 | 1 | 1.8 | 1.8 | 9.1 |
| 54.00 | 1 | 1.8 | 1.8 | 10.9 |
| 54.90 | 1 | 1.8 | 1.8 | 12.7 |
| 56.25 | 3 | 5.5 | 5.5 | 18.2 |
| 58.50 | 1 | 1.8 | 1.8 | 20.0 |
| 60.30 | 2 | 3.6 | 3.6 | 23.6 |
| 60.75 | 3 | 5.5 | 5.5 | 29.1 |
| 62.55 | 1 | 1.8 | 1.8 | 30.9 |
| 63.00 | 3 | 5.5 | 5.5 | 36.4 |
| 63.90 | 1 | 1.8 | 1.8 | 38.2 |
| 65.25 | 3 | 5.5 | 5.5 | 43.6 |
| 67.50 | 5 | 9.1 | 9.1 | 52.7 |
| 69.75 | 2 | 3.6 | 3.6 | 56.4 |
| 72.00 | 1 | 1.8 | 1.8 | 58.2 |
| 74.25 | 1 | 1.8 | 1.8 | 60.0 |
| 75.15 | 1 | 1.8 | 1.8 | 61.8 |
| 78.75 | 5 | 9.1 | 9.1 | 70.9 |
| 79.81 | 1 | 1.8 | 1.8 | 72.7 |
| 80.00 | 1 | 1.8 | 1.8 | 74.5 |
| 81.00 | 2 | 3.6 | 3.6 | 78.2 |
| 82.80 | 1 | 1.8 | 1.8 | 80.0 |
| 83.25 | 1 | 1.8 | 1.8 | 81.8 |
| 83.70 | 1 | 1.8 | 1.8 | 83.6 |
| 85.50 | 3 | 5.5 | 5.5 | 89.1 |
| 87.75 | 1 | 1.8 | 1.8 | 90.9 |
| 90.00 | 1 | 1.8 | 1.8 | 92.7 |
| 94.50 | 2 | 3.6 | 3.6 | 96.4 |
| 96.30 | 1 | 1.8 | 1.8 | 98.2 |
| 96.75 | 1 | 1.8 | 1.8 | 100.0 |
| Total | 55 | 100.0 | 100.0 |  |

If you choose to split your data using the Compare groups option and then run a statistical analysis in SPSS. Result gives us a breakdown of how many observations were in each group (N), and the minimum, maximum, average, and standard deviation of each group. The '.' group contains cases with missing gender values and non-missing weight values.

Answer 6: The mean, median, and standard deviation of weight is 70.53, 67.50, and 13.26, respectively.

For “Weight Variable”

|  |  |  |
| --- | --- | --- |
| **Statistics** | | |
| Weight (kg) | | |
| N | Valid | 55 |
| Missing | 0 |
| Mean | | 70.5284 |
| Median | | 67.5000 |
| Mode | | 67.50a |
| Std. Deviation | | 13.26490 |
| a. Multiple modes exist. The smallest value is shown | | |