

## Math 191: Probability & Statistics Assignment #2-I Version A

**Title:** Presenting Data: Arrays, Displays, Tables & Charts

**Objectives:** To practice preparing data for presentation by

- Organizing an ordered array of the data,
- Arranging a stem-and-leaf display,
- Forming frequency distributions, and
- Depicting the results in visual form.

To become familiar with the Excel functions that enable these activities.

The following set of data<sup>1</sup> represents the electricity cost during the month of July 1997 for a random sample of 50 two-bedroom apartments in a large city.

<u>Raw Data Set (A) on Utility Charges (\$)</u>									
83	182	193	178	139	101	160	194	116	84
148	176	105	121	171	120	153	210	136	179
128	152	202	162	129	131	146	171	116	172
81	165	160	167	120	142	196	177	147	157
102	115	190	141	123	146	203	144	118	154

### Instructions:<sup>2</sup>

- (1) Sort the data in an ordered array.
- (2) Generate a stem-and-leaf display of the data.<sup>3</sup>
- (3) Form a frequency distribution having five class intervals. Determine the class boundaries and use the Excel FREQUENCY function to obtain the related values.
- (4) Now, form a frequency distribution having seven class intervals with the following upper class limits: \$99, \$119, \$139, \$159, \$179, \$199, \$219. (e.g. 0-99, 100-119, etc.)
- (5) Form the percentage distribution from the frequency distribution obtained in the previous step.
- (6) Plot the percentage histogram. Assign the graph with a meaningful title and labels. Make sure to adjust the histogram in accordance with the directions on pp. 82-3 of your textbook.

### Notes:

- When completing this lab, clearly indicate your name, the lab title, the course number and section, and the data set (A, B, C, etc.) that you are using.
- If possible, assign *meaningful* names to each of your answers. Don't just label a column "the answer to part (c)."
- Before submitting your work, review and proofread your lab for accuracy and simple typing errors.

<sup>1</sup>Download the relevant column from the file located at the course website ([www.devryu.net](http://www.devryu.net)).

<sup>2</sup>Consult the textbook sections 2.1-2.4, Middleton Ch.4 and Johnson & Kuby Ch.2 (and CD) for tips on completing this lab.

<sup>3</sup>Use the final digit for the "leaf" and the first digit(s) as the "stem."

## Math 191: Probability & Statistics Assignment #2-I Version B

**Title:** Presenting Data: Arrays, Displays, Tables & Charts

**Objectives:** To practice preparing data for presentation by

- Organizing an ordered array of the data,
- Arranging a stem-and-leaf display,
- Forming frequency distributions, and
- Depicting the results in visual form.

To become familiar with the Excel functions that enable these activities.

The following set of data<sup>1</sup> represents the electricity cost during the month of July 1997 for a random sample of 50 two-bedroom apartments in a large city.

<u>Raw Data Set (B) on Utility Charges (\$)</u>									
93	159	193	171	161	87	158	188	127	85
154	176	93	131	178	97	137	213	144	150
129	163	198	164	134	123	130	180	112	81
90	172	136	167	129	150	179	157	147	160
122	124	188	161	111	132	186	125	138	171

### Instructions:<sup>2</sup>

- (1) Sort the data in an ordered array.
- (2) Generate a stem-and-leaf display of the data.<sup>3</sup>
- (3) Form a frequency distribution having five class intervals. Determine the class boundaries and use the Excel FREQUENCY function to obtain the related values.
- (4) Now, form a frequency distribution having seven class intervals with the following upper class limits: \$99, \$119, \$139, \$159, \$179, \$199, \$219. (e.g. 0-99, 100-119, etc.)
- (5) Form the percentage distribution from the frequency distribution obtained in the previous step.
- (6) Plot the percentage histogram. Assign the graph with a meaningful title and labels. Make sure to adjust the histogram in accordance with the directions on pp. 82-3 of your textbook.

### Notes:

- When completing this lab, clearly indicate your name, the lab title, the course number and section, and the data set (A, B, C, etc.) that you are using.
- If possible, assign *meaningful* names to each of your answers. Don't just label a column "the answer to part (c)."
- Before submitting your work, review and proofread your lab for accuracy and simple typing errors.

<sup>1</sup>Download the relevant column from the file located at the course website ([www.devryu.net](http://www.devryu.net)).

<sup>2</sup>Consult the textbook sections 2.1-2.4, Middleton Ch.4 and Johnson & Kuby Ch.2 (and CD) for tips on completing this lab.

<sup>3</sup>Use the final digit for the "leaf" and the first digit(s) as the "stem."

## Math 191: Probability & Statistics Assignment #2-I Version C

**Title:** Presenting Data: Arrays, Displays, Tables & Charts

**Objectives:** To practice preparing data for presentation by

- Organizing an ordered array of the data,
- Arranging a stem-and-leaf display,
- Forming frequency distributions, and
- Depicting the results in visual form.

To become familiar with the Excel functions that enable these activities.

The following set of data<sup>1</sup> represents the electricity cost during the month of July 1997 for a random sample of 50 two-bedroom apartments in a large city.

<u>Raw Data Set (C) on Utility Charges (\$)</u>									
107	185	195	188	161	111	149	202	125	82
152	197	90	122	159	114	158	218	119	173
129	134	197	167	136	121	143	162	116	176
110	159	147	158	145	152	194	160	127	157
107	130	198	136	127	140	188	150	126	151

### **Instructions:**<sup>2</sup>

- (1) Sort the data in an ordered array.
- (2) Generate a stem-and-leaf display of the data.<sup>3</sup>
- (3) Form a frequency distribution having five class intervals. Determine the class boundaries and use the Excel FREQUENCY function to obtain the related values.
- (4) Now, form a frequency distribution having seven class intervals with the following upper class limits: \$99, \$119, \$139, \$159, \$179, \$199, \$219. (e.g. 0-99, 100-119, etc.)
- (5) Form the percentage distribution from the frequency distribution obtained in the previous step.
- (6) Plot the percentage histogram. Assign the graph with a meaningful title and labels. Make sure to adjust the histogram in accordance with the directions on pp. 82-3 of your textbook.

### **Notes:**

- When completing this lab, clearly indicate your name, the lab title, the course number and section, and the data set (A, B, C, etc.) that you are using.
- If possible, assign *meaningful* names to each of your answers. Don't just label a column "the answer to part (c)."
- Before submitting your work, review and proofread your lab for accuracy and simple typing errors.

<sup>1</sup>Download the relevant column from the file located at the course website ([www.devryu.net](http://www.devryu.net)).

<sup>2</sup>Consult the textbook sections 2.1-2.4, Middleton Ch.4 and Johnson & Kuby Ch.2 (and CD) for tips on completing this lab.

<sup>3</sup>Use the final digit for the "leaf" and the first digit(s) as the "stem."

## Math 191: Probability & Statistics Assignment #2-I Version D

**Title:** Presenting Data: Arrays, Displays, Tables & Charts

**Objectives:** To practice preparing data for presentation by

- Organizing an ordered array of the data,
- Arranging a stem-and-leaf display,
- Forming frequency distributions, and
- Depicting the results in visual form.

To become familiar with the Excel functions that enable these activities.

The following set of data<sup>1</sup> represents the electricity cost during the month of July 1997 for a random sample of 50 two-bedroom apartments in a large city.

<u>Raw Data Set (D) on Utility Charges (\$)</u>									
88	180	189	178	160	103	152	199	138	82
165	175	90	120	177	122	155	214	141	174
126	149	216	184	129	136	134	165	112	160
92	174	151	145	131	133	184	176	140	148
103	110	184	161	121	143	183	133	126	153

### Instructions:<sup>2</sup>

- (1) Sort the data in an ordered array.
- (2) Generate a stem-and-leaf display of the data.<sup>3</sup>
- (3) Form a frequency distribution having five class intervals. Determine the class boundaries and use the Excel FREQUENCY function to obtain the related values.
- (4) Now, form a frequency distribution having seven class intervals with the following upper class limits: \$99, \$119, \$139, \$159, \$179, \$199, \$219. (e.g. 0-99, 100-119, etc.)
- (5) Form the percentage distribution from the frequency distribution obtained in the previous step.
- (6) Plot the percentage histogram. Assign the graph with a meaningful title and labels. Make sure to adjust the histogram in accordance with the directions on pp. 82-3 of your textbook.

### Notes:

- When completing this lab, clearly indicate your name, the lab title, the course number and section, and the data set (A, B, C, etc.) that you are using.
- If possible, assign *meaningful* names to each of your answers. Don't just label a column "the answer to part (c)."
- Before submitting your work, review and proofread your lab for accuracy and simple typing errors.

<sup>1</sup>Download the relevant column from the file located at the course website ([www.devryu.net](http://www.devryu.net)).

<sup>2</sup>Consult the textbook sections 2.1-2.4, Middleton Ch.4 and Johnson & Kuby Ch.2 (and CD) for tips on completing this lab.

<sup>3</sup>Use the final digit for the "leaf" and the first digit(s) as the "stem."

## Math 191: Probability & Statistics Assignment #2-I Version E

**Title:** Presenting Data: Arrays, Displays, Tables & Charts

**Objectives:** To practice preparing data for presentation by

- Organizing an ordered array of the data,
- Arranging a stem-and-leaf display,
- Forming frequency distributions, and
- Depicting the results in visual form.

To become familiar with the Excel functions that enable these activities.

The following set of data<sup>1</sup> represents the electricity cost during the month of July 1997 for a random sample of 50 two-bedroom apartments in a large city.

<u>Raw Data Set (E) on Utility Charges (\$)</u>									
105	175	216	165	161	96	150	208	114	81
150	178	91	126	162	110	146	211	136	161
144	153	206	187	123	123	136	167	106	176
96	176	138	168	119	145	190	161	139	138
103	104	184	157	117	135	191	146	134	149

### **Instructions:**<sup>2</sup>

- (1) Sort the data in an ordered array.
- (2) Generate a stem-and-leaf display of the data.<sup>3</sup>
- (3) Form a frequency distribution having five class intervals. Determine the class boundaries and use the Excel FREQUENCY function to obtain the related values.
- (4) Now, form a frequency distribution having seven class intervals with the following upper class limits: \$99, \$119, \$139, \$159, \$179, \$199, \$219. (e.g. 0-99, 100-119, etc.)
- (5) Form the percentage distribution from the frequency distribution obtained in the previous step.
- (6) Plot the percentage histogram. Assign the graph with a meaningful title and labels. Make sure to adjust the histogram in accordance with the directions on pp. 82-3 of your textbook.

### **Notes:**

- When completing this lab, clearly indicate your name, the lab title, the course number and section, and the data set (A, B, C, etc.) that you are using.
- If possible, assign *meaningful* names to each of your answers. Don't just label a column "the answer to part (c)."
- Before submitting your work, review and proofread your lab for accuracy and simple typing errors.

<sup>1</sup>Download the relevant column from the file located at the course website ([www.devryu.net](http://www.devryu.net)).

<sup>2</sup>Consult the textbook sections 2.1-2.4, Middleton Ch.4 and Johnson & Kuby Ch.2 (and CD) for tips on completing this lab.

<sup>3</sup>Use the final digit for the "leaf" and the first digit(s) as the "stem."

## Math 191: Probability & Statistics Assignment #2-I Version F

**Title:** Presenting Data: Arrays, Displays, Tables & Charts

**Objectives:** To practice preparing data for presentation by

- Organizing an ordered array of the data,
- Arranging a stem-and-leaf display,
- Forming frequency distributions, and
- Depicting the results in visual form.

To become familiar with the Excel functions that enable these activities.

The following set of data<sup>1</sup> represents the electricity cost during the month of July 1997 for a random sample of 50 two-bedroom apartments in a large city.

<u>Raw Data Set (F) on Utility Charges (\$)</u>									
105	186	203	175	159	117	143	206	136	82
169	188	90	116	161	116	163	213	130	172
148	151	212	186	113	127	154	177	115	177
80	156	165	163	122	136	197	167	127	139
118	123	177	153	127	125	194	140	130	145

### **Instructions:**<sup>2</sup>

- (1) Sort the data in an ordered array.
- (2) Generate a stem-and-leaf display of the data.<sup>3</sup>
- (3) Form a frequency distribution having five class intervals. Determine the class boundaries and use the Excel FREQUENCY function to obtain the related values.
- (4) Now, form a frequency distribution having seven class intervals with the following upper class limits: \$99, \$119, \$139, \$159, \$179, \$199, \$219. (e.g. 0-99, 100-119, etc.)
- (5) Form the percentage distribution from the frequency distribution obtained in the previous step.
- (6) Plot the percentage histogram. Assign the graph with a meaningful title and labels. Make sure to adjust the histogram in accordance with the directions on pp. 82-3 of your textbook.

### **Notes:**

- When completing this lab, clearly indicate your name, the lab title, the course number and section, and the data set (A, B, C, etc.) that you are using.
- If possible, assign *meaningful* names to each of your answers. Don't just label a column "the answer to part (c)."
- Before submitting your work, review and proofread your lab for accuracy and simple typing errors.

<sup>1</sup>Download the relevant column from the file located at the course website ([www.devryu.net](http://www.devryu.net)).

<sup>2</sup>Consult the textbook sections 2.1-2.4, Middleton Ch.4 and Johnson & Kuby Ch.2 (and CD) for tips on completing this lab.

<sup>3</sup>Use the final digit for the "leaf" and the first digit(s) as the "stem."

## Math 191: Probability & Statistics Assignment #2-I Version G

**Title:** Presenting Data: Arrays, Displays, Tables & Charts

**Objectives:** To practice preparing data for presentation by

- Organizing an ordered array of the data,
- Arranging a stem-and-leaf display,
- Forming frequency distributions, and
- Depicting the results in visual form.

To become familiar with the Excel functions that enable these activities.

The following set of data<sup>1</sup> represents the electricity cost during the month of July 1997 for a random sample of 50 two-bedroom apartments in a large city.

<u>Raw Data Set (G) on Utility Charges (\$)</u>									
96	165	210	178	152	96	142	185	116	93
172	190	85	127	171	118	158	213	144	155
145	139	197	184	123	130	151	180	100	162
108	157	162	140	144	156	184	168	126	160
101	134	170	151	118	150	190	124	133	168

### Instructions:<sup>2</sup>

- (1) Sort the data in an ordered array.
- (2) Generate a stem-and-leaf display of the data.<sup>3</sup>
- (3) Form a frequency distribution having five class intervals. Determine the class boundaries and use the Excel FREQUENCY function to obtain the related values.
- (4) Now, form a frequency distribution having seven class intervals with the following upper class limits: \$99, \$119, \$139, \$159, \$179, \$199, \$219. (e.g. 0-99, 100-119, etc.)
- (5) Form the percentage distribution from the frequency distribution obtained in the previous step.
- (6) Plot the percentage histogram. Assign the graph with a meaningful title and labels. Make sure to adjust the histogram in accordance with the directions on pp. 82-3 of your textbook.

### Notes:

- When completing this lab, clearly indicate your name, the lab title, the course number and section, and the data set (A, B, C, etc.) that you are using.
- If possible, assign *meaningful* names to each of your answers. Don't just label a column "the answer to part (c)."
- Before submitting your work, review and proofread your lab for accuracy and simple typing errors.

<sup>1</sup>Download the relevant column from the file located at the course website ([www.devryu.net](http://www.devryu.net)).

<sup>2</sup>Consult the textbook sections 2.1-2.4, Middleton Ch.4 and Johnson & Kuby Ch.2 (and CD) for tips on completing this lab.

<sup>3</sup>Use the final digit for the "leaf" and the first digit(s) as the "stem."

## Math 191: Probability & Statistics Assignment #2-I Version H

**Title:** Presenting Data: Arrays, Displays, Tables & Charts

**Objectives:** To practice preparing data for presentation by

- Organizing an ordered array of the data,
- Arranging a stem-and-leaf display,
- Forming frequency distributions, and
- Depicting the results in visual form.

To become familiar with the Excel functions that enable these activities.

The following set of data<sup>1</sup> represents the electricity cost during the month of July 1997 for a random sample of 50 two-bedroom apartments in a large city.

<u>Raw Data Set (H) on Utility Charges (\$)</u>									
98	179	203	169	145	115	142	187	133	82
159	196	97	130	169	111	139	206	127	180
146	147	215	179	121	127	135	177	123	165
98	165	152	156	139	134	193	166	153	153
121	131	184	139	108	144	201	148	132	151

### Instructions:<sup>2</sup>

- (1) Sort the data in an ordered array.
- (2) Generate a stem-and-leaf display of the data.<sup>3</sup>
- (3) Form a frequency distribution having five class intervals. Determine the class boundaries and use the Excel FREQUENCY function to obtain the related values.
- (4) Now, form a frequency distribution having seven class intervals with the following upper class limits: \$99, \$119, \$139, \$159, \$179, \$199, \$219. (e.g. 0-99, 100-119, etc.)
- (5) Form the percentage distribution from the frequency distribution obtained in the previous step.
- (6) Plot the percentage histogram. Assign the graph with a meaningful title and labels. Make sure to adjust the histogram in accordance with the directions on pp. 82-3 of your textbook.

### Notes:

- When completing this lab, clearly indicate your name, the lab title, the course number and section, and the data set (A, B, C, etc.) that you are using.
- If possible, assign *meaningful* names to each of your answers. Don't just label a column "the answer to part (c)."
- Before submitting your work, review and proofread your lab for accuracy and simple typing errors.

<sup>1</sup>Download the relevant column from the file located at the course website ([www.devryu.net](http://www.devryu.net)).

<sup>2</sup>Consult the textbook sections 2.1-2.4, Middleton Ch.4 and Johnson & Kuby Ch.2 (and CD) for tips on completing this lab.

<sup>3</sup>Use the final digit for the "leaf" and the first digit(s) as the "stem."

## Math 191: Probability & Statistics Assignment #2-I Version I

**Title:** Presenting Data: Arrays, Displays, Tables & Charts

**Objectives:** To practice preparing data for presentation by

- Organizing an ordered array of the data,
- Arranging a stem-and-leaf display,
- Forming frequency distributions, and
- Depicting the results in visual form.

To become familiar with the Excel functions that enable these activities.

The following set of data<sup>1</sup> represents the electricity cost during the month of July 1997 for a random sample of 50 two-bedroom apartments in a large city.

<u>Raw Data Set (I) on Utility Charges (\$)</u>									
102	179	212	179	136	109	161	202	137	88
165	200	90	130	161	99	138	215	121	174
141	154	202	160	122	129	133	182	120	166
92	159	161	163	143	139	179	178	135	161
112	112	180	154	103	131	181	137	127	148

### **Instructions:**<sup>2</sup>

- (1) Sort the data in an ordered array.
- (2) Generate a stem-and-leaf display of the data.<sup>3</sup>
- (3) Form a frequency distribution having five class intervals. Determine the class boundaries and use the Excel FREQUENCY function to obtain the related values.
- (4) Now, form a frequency distribution having seven class intervals with the following upper class limits: \$99, \$119, \$139, \$159, \$179, \$199, \$219. (e.g. 0-99, 100-119, etc.)
- (5) Form the percentage distribution from the frequency distribution obtained in the previous step.
- (6) Plot the percentage histogram. Assign the graph with a meaningful title and labels. Make sure to adjust the histogram in accordance with the directions on pp. 82-3 of your textbook.

### **Notes:**

- When completing this lab, clearly indicate your name, the lab title, the course number and section, and the data set (A, B, C, etc.) that you are using.
- If possible, assign *meaningful* names to each of your answers. Don't just label a column "the answer to part (c)."
- Before submitting your work, review and proofread your lab for accuracy and simple typing errors.

<sup>1</sup>Download the relevant column from the file located at the course website ([www.devryu.net](http://www.devryu.net)).

<sup>2</sup>Consult the textbook sections 2.1-2.4, Middleton Ch.4 and Johnson & Kuby Ch.2 (and CD) for tips on completing this lab.

<sup>3</sup>Use the final digit for the "leaf" and the first digit(s) as the "stem."

## Math 191: Probability & Statistics Assignment #2-I Version J

**Title:** Presenting Data: Arrays, Displays, Tables & Charts

**Objectives:** To practice preparing data for presentation by

- Organizing an ordered array of the data,
- Arranging a stem-and-leaf display,
- Forming frequency distributions, and
- Depicting the results in visual form.

To become familiar with the Excel functions that enable these activities.

The following set of data<sup>1</sup> represents the electricity cost during the month of July 1997 for a random sample of 50 two-bedroom apartments in a large city.

<u>Raw Data Set (J) on Utility Charges (\$)</u>									
93	160	193	163	162	104	160	206	142	82
153	197	98	109	173	98	159	210	130	151
129	162	209	174	117	137	139	180	110	163
109	174	164	148	139	139	197	167	124	138
109	129	191	162	116	134	196	135	129	161

### Instructions:<sup>2</sup>

- (1) Sort the data in an ordered array.
- (2) Generate a stem-and-leaf display of the data.<sup>3</sup>
- (3) Form a frequency distribution having five class intervals. Determine the class boundaries and use the Excel FREQUENCY function to obtain the related values.
- (4) Now, form a frequency distribution having seven class intervals with the following upper class limits: \$99, \$119, \$139, \$159, \$179, \$199, \$219. (e.g. 0-99, 100-119, etc.)
- (5) Form the percentage distribution from the frequency distribution obtained in the previous step.
- (6) Plot the percentage histogram. Assign the graph with a meaningful title and labels. Make sure to adjust the histogram in accordance with the directions on pp. 82-3 of your textbook.

### Notes:

- When completing this lab, clearly indicate your name, the lab title, the course number and section, and the data set (A, B, C, etc.) that you are using.
- If possible, assign *meaningful* names to each of your answers. Don't just label a column "the answer to part (c)."
- Before submitting your work, review and proofread your lab for accuracy and simple typing errors.

<sup>1</sup>Download the relevant column from the file located at the course website ([www.devryu.net](http://www.devryu.net)).

<sup>2</sup>Consult the textbook sections 2.1-2.4, Middleton Ch.4 and Johnson & Kuby Ch.2 (and CD) for tips on completing this lab.

<sup>3</sup>Use the final digit for the "leaf" and the first digit(s) as the "stem."