1. In a survey prior to a midterm election, potential voters were asked their age, their gender, their marital status, their party affiliation, their zip code, their income, the number of children in their household, estimated mileage driven per week, and their willingness to pay an additional $0.05 per gallon tax to help fund infrastructure maintenance and repair. For how many numerical variables did the survey seek data?

A) 0  B) 1  C) 2  D) 3  E) 4  
F) 5  G) 6  H) 7  I) 8  J) 9

Solution. Age, Income, Number of children in household, and Mileage driven per week are numerical variables— their values are numbers that could be used as numbers. The other variables are categorical.

Answer: E

2. The following contingency table concerns the 30 days of one April in St. Louis. The columns are for the two categories, Did Rain and Did not Rain, of the variable Actual Precipitation. The rows are for the two categories, Rain Predicted and Rain Not Predicted, of the variable Precipitation Forecast.

<table>
<thead>
<tr>
<th></th>
<th>Did Rain</th>
<th>Did Not Rain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rain Predicted</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Rain Not Predicted</td>
<td>2</td>
<td>20</td>
</tr>
</tbody>
</table>

On what percent of days did it actually rain?

A) 6.67  B) 9.09  C) 10  D) 13.04  E) 16.67  
F) 23.33  G) 26.67  H) 28.57  I) 30.43  J) 37.50

Solution. It rained on $5 + 2$, or 7 days. That amounts to $\frac{7}{30} \times 100$ percent, or 23.33%.

Answer: F

3. Refer to the data of the preceding question. On what percentage of days was the forecast correct?

A) 78.15  B) 79.43  C) 80.77  D) 82.17  E) 83.33  
F) 86.96  G) 88.00  H) 90.91  I) 95.65  J) 96.27

Solution. The forecast was correct on $5 + 20$, or 25 days. That amounts to $\frac{25}{30} \times 100$ percent, or 83.33%.

Answer: E
4. The table below records the number of tornadoes in 2013 by month and by state (for the three western midwestern states).

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>MN</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>18</td>
<td>12</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IA</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>8</td>
<td>12</td>
<td>16</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>MO</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Which one of the following 10 numbers is an entry of the marginal distribution of the variable Tornadoes by State?

A) 30  B) 32  C) 34  D) 36  E) 38  
F) 40  G) 42  H) 44  I) 46  J) 48

**Solution.** The marginal distribution of Tornadoes by State is obtained by summing the entries of each row. The result would normally be adjoined to the given table as a right margin. Here we will set it out horizontally:

<table>
<thead>
<tr>
<th>Tornadoes</th>
<th>MN</th>
<th>IA</th>
<th>MO</th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td>52</td>
<td>46</td>
<td></td>
</tr>
</tbody>
</table>

**Answer:** I

5. Refer to the tornado data provided in the preceding problem. There are numerous conditional distributions that can be extracted from the table. Of the various distributions of Tornadoes by State conditioned by the value of a categorical variable, find the one for which the sum of its entries is greatest, and respond with that greatest sum.

A) 17  B) 20  C) 22  D) 29  E) 32  
F) 36  G) 40  H) 46  I) 52  J) 54

**Solution.** There are 12 distributions of Tornadoes by State conditioned by the value of Month being specified. These conditional distributions are the three entry columns of the given table. One sees at a glance that the greatest column sum occurs in June and is 40.

**Answer:** G
For the next three questions, consider the following table of frequencies of the ages of American presidents at the time of inaugurations.

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>40–44</th>
<th>45–49</th>
<th>50–54</th>
<th>55–59</th>
<th>60–64</th>
<th>65–69</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>2</td>
<td>7</td>
<td>13</td>
<td>12</td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: This binning does not violate any of the conventions discussed in class. It may help to quickly sketch a histogram that includes the class limits (to which you should pay particular attention), but your sketch will not be graded.

6. The distribution is
   A) unimodal and skewed left  B) unimodal and symmetric
   C) unimodal and skewed right  D) bimodal and skewed left
   E) bimodal and symmetric  F) bimodal and skewed right
   G) multimodal and skewed left  H) multimodal and symmetric
   I) multimodal and skewed right  J) uniform

**Solution.** A naturally-occurring sample of size 44 (sum all the frequencies) could hardly be more symmetric. There is one peak: the bin 50–54.

**Answer:** B

7. If we bin the Age variable according to the given table, then the class size in years is
   A) 2  B) 2.5  C) 3  D) 3.5  E) 4
   F) 4.5  G) 5  H) 29  I) 30  J) 44

**Solution.** If you turn 45 years old tomorrow, then you are 44 years old today. So, the bin “40–44” written in mathematical notation is \([40,45)\) and the next bin is \([45,50)\). This is consistent with our adopted convention of placing class limits in the higher bin. I would not want this answer to rest solely on a language quirk, and it does not! Remember that, when a numerical variable is binned, there are no gaps between bins (although empty bins can separate occupied bins). So consecutive bins \([40,44)\) and \([45,50)\) are not allowed. The class size (width) is 45–40, or 5. (The bins all have the same class size.)

**Answer:** G

8. Having only the given table and no other information, a student approximated the average age of American presidents at the time of inauguration by assuming that the average age of the presidents within each bin was equal to the class mark for that bin. What approximation resulted?

   A) 54.73  B) 54.83  C) 54.93  D) 55.03  E) 55.13
   F) 55.23  G) 55.33  H) 55.43  I) 55.53  J) 55.63

**Solution.** The sum of the ages at inauguration of all the presidents in one bin is the product of the number of presidents in the bin, i.e., the tabulated frequency for the bin, and their average age. which has been assumed to be the class mark (midpoint) of the bin. Therefore, the sum of all the ages at inauguration of the 44 presidents is calculated as

\[
2 \times 42.5 + 7 \times 47.5 + 13 \times 52.5 + 12 \times 57.5 + 7 \times 62.5 + 3 \times 67.5.
\]

This sum is 2430, so the average age estimate is 2430/44, or 55.22727. Given that the center of this symmetric distribution appears to be around 55, this answer is ballpark correct.

**Answer:** F
9. Suppose that $X$ is a numerical variable with $N$ data values $x_1, x_2, \ldots, x_N$. Let $Y = X + 7$. This means that the data values $y_1, y_2, \ldots, y_N$ of $Y$ are given by the formula $y_j = x_j + 7$ for $1 \leq j \leq N$. Which of the following 6 statistical measures must be the same for $X$ and $Y$?

A) mean  B) median  
C) mode  D) lower quartile  
E) upper quartile  F) IQR  
G) None of the above  H) Exactly two of the cited measures  
I) Exactly three of the cited measures  J) All 6 cited measures

Solution. We see from the definitions that the values for $Y$ of mean, median, mode, lower quartile, and upper quartile exceed those of $X$ by 7. This increase of 7 disappears in the subtraction, $Q_3 - Q_1$. Thus, the IQR is the only one of the 6 cited measures that does not change. (The standard deviation and variance also do not change, but they have not been considered in this problem.)

Answer: F

10. A class survey of the time required to complete a homework assignment resulted in the following histogram:

What percentage of the class was able to complete the assignment in less than one hour? (Round to the nearest integer.)

A) 18  B) 19  C) 20  D) 21  E) 22  
F) 23  G) 24  H) 25  I) 26  J) 27

Solution. From left to right, the frequencies are 1,2,4,7,8,6,3,3,2. The number of students in the course is the sum of these frequencies, or 36. The number of students who finish in less than an hour is the sum of the frequencies for the first three 20-minute bins, or 7. (A student who finished in exactly one hour would be in the fourth bin, according to our convention, but exactly one hour is not less than one hour.) The requested percentage is $\frac{7}{36} \times 100$, or 19.44%. The nearest integer is 19.

Answer: B
11. To get a feel for the wages McDonnell’s pays its part time employees, a very small sample was taken. The weekly salaries of Ray, Roe, Ron, and Rhea were $120, $128, $160, and $176. What is the standard deviation of this sample?

A) 22.02  B) 22.89  C) 22.89  D) 23.77  E) 24.64  
F) 25.52  G) 26.43  H) 27.25  I) 28.08  J) 28.95

Solution. The sample mean is 146. The sample standard deviation is

$$\sqrt{\frac{1}{(4-1)}\left((120 - 146)^2 + (128-146)^2 + (160-146)^2 + (176-146)^2\right)} = 26.4323.$$ 

Answer: G

12. Let $M$ denote the median and $m_*$ the mode of the data set 11,9,5,2,9,3,2,7,11,10,7,9. What is $M - m_*$? (Use the course definition of median and none other! For the mode use the basic definition and not the somewhat more vague derivative definitions.)

A) -2.0  B) -1.5  C) -1.0  D) -0.5  E) 0  
F) 0.5  G) 1.0  H) 1.5  I) 2.0  J) 2.5

Solution. The size of the data set is 12, an even number, and we will have to sort it ourselves: 2,2,3,5,7,7,9,9,9,10,11,11. The median is the average of the two middle values: $M = (7 + 9)/2 = 8$. The value that occurs most frequently is 9: $m_* = 9$. Therefore, $M - m_* = 8 - 9 = -1$.

Answer: C

13. In a study of cesarean sections (surgical deliveries), the numbers performed by the 13 female doctors sampled were 5, 7, 10, 14, 18, 19, 25, 29, 31, 33, 35, 35, 41. What is the upper quartile of this sample? (Use the course definition and none other!)

A) 30.5  B) 31  C) 31.5  D) 32  E) 32.5  
F) 33  G) 33.5  H) 34  I) 34.5  J) 35

Solution. The odd sample size has been given to us presorted: 5, 7, 10, 14,18, 19, 25, 29, 31, 33, 35, 35, 41. The non-averaged median is included with the upper half of data values in the calculation of $Q_3$:

$$Q_3 = \text{median of 25, 29, 31, 33, 35, 35, 41} = 33.$$ 

Answer: F
14. In the same study of cesarean sections, the numbers performed by the 15 male doctors sampled were
27, 50, 33, 25, 86, 25, 85, 31, 37, 44, 20, 36, 59, 34, 28. What is the IQR of this sample of male doctors?
(Use the course definition and none other!)

A) 16.5  B) 18.5  C) 19  D) 19.5  E) 20
F) 20.5  G) 21  H) 21.5  I) 22  J) 33

Solution. The odd sample size data set must be sorted:
20 25 25 27 28 31 33 34 36 37 44 50 59 85 86.
The non-averaged median is included with the upper and lower halves of data values in the calculation of \( Q_1 \)
and \( Q_3 \):
20 25 25 27 28 31 33 34 36 37 44 50 59 85 86.
The medians of these sets of values are the averages of their middle values: \((27 + 28)/2\) and \((44 + 50)/2\), or
27.5 and 47. Thus, \( Q_1 = 27.5 \), \( Q_3 = 47 \), and \( IQR = 47 - 27.5 = 19.5 \)

Answer: D

15. Suppose that the distribution of net worths of a 12 member Board of Directors is

<table>
<thead>
<tr>
<th>Net worth (Millions of dollars)</th>
<th>[16,18)</th>
<th>[18,20)</th>
<th>[20,22)</th>
<th>[22,24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

If one of the board members were replaced by Bill Gates (net worth: $80,600,000,000), then, of the five statistical measures, mean, median, mode, range, variance, which would show little or no change?

A) mean only  B) median only
C) mode only  D) mean & median only
E) mean & mode only  F) median & mode only
G) mean, median, & mode only  H) range only
I) variance only  J) range & variance only

Solution. The mean will change from around 21 million to something around 7000 million. The median will
be little changed. In fact, if one of the five wealthiest board members were the one replaced, then the median
would not change at all. In any other replacement, the median would remain in the bin \([20,22)\), which is to
say that it would not change very much. As for the mode, even if the bin \([20,22)\) lost one member, it would
still remain the mode. With Gates on the board, the largest value of the data set would jump by about 86
billion with Gates. The lowest value would change if Gates replaced the most impoverished board member,
but the lowest value would jump by at most a couple of million—a mere rounding error compared to 86 bil-
lion. In other words, the range would change greatly. The variance would be changed by replacing a summand
of the order (a couple of million)^2/11 with a summand of the order (86thousand million)^2/11. A huge change.

Answer: F

16. A horizontal Tukey boxplot is drawn for the data set 22, 23, 27, 28, 29, 30, 33, 34, 34. At what number
is the fence on the right drawn?

A) 34  B) 38  C) 38.5  D) 39  E) 39.5
F) 40  G) 40.5  H) 41  I) 41.5  J) 42

Solution. The median of the presorted set 22 23 27 28 29 30 33 34 34 is 29. The median, \( Q_1 \), of
22 23 27 28 29 is 27. The median, \( Q_3 \), of 29 30 33 34 34 is 33. Thus, \( IQR = 33 - 27 \), or
6. The fence on the right is at \( Q_3 + 1.5 \times IQR \), or \( 33 + 1.5 \times 6 \), or 42.

Answer: J

17. A vertical Tukey boxplot is drawn for the data set 24, 32, 33, 35, 36, 37, 38, 38, 40, 41. How many units long is the lower whisker?

A) 2  B) 3  C) 4  D) 5  E) 6
F) 7  G) 8  H) 9  I) 10  J) 11

Solution. The median of the presorted set 24 32 33 35 36 37 38 38 40 41 is 36. The median, \( Q_1 \), of 24 32 33 35 36 is the average of the middle values, 34. The median, \( Q_3 \), of 36 37 38 38 40 41 is the average of the middle values, 38. Thus, IQR = 38 - 34, or 4. The lower fence is at \( Q_1 - 1.5 \times IQR \), or 34 - 1.5 \times 4, or 28. The lower whisker begins at the smallest value that is not lower than this fence. That value is 32. Thus, the length of the lower whisker is \( Q_1 - 32 \), or 34 - 32, or 2.

Answer: A

18. For the data set whose Tukey boxplot is shown, the greatest data value is how many units greater than the median?

A) 2  B) 3  C) 4  D) 5  E) 6
F) 7  G) 8  H) 9  I) 10  J) 11

Solution. The median is at 7 and the greatest data value is the outlier at 17. The requested number is 17 - 7, or 10.

Answer: I

19. For a distribution with five number summary 0, 14, 17, 22, 31, how many units long can its horizontal Tukey boxplot be, from the left tip of the left whisker to the right tip of the right whisker? (Reply with the maximum number of units that is consistent with the given data.)

A) 28  B) 29  C) 30  D) 31  E) 32
F) 33  G) 34  H) 35  I) 36  J) 37
Solution. The IQR is 22 – 14, or 8. The whiskers can be as long as $1.5 \times \text{IQR}$, or 12. The left whisker could be this long, and would be if $Q_1 = 12$, or 2, were a member of the data set. Because the minimum value is 0, this situation is possible. Thus, the boxplot could begin at 2 on the left. On the right, the whisker could stretch to $Q_3 + 12$, or 34. But the largest value of the data set is 31, so that is where the whisker must terminate. The length of the boxplot could therefore be a maximum of 31 – 2, or 29.

Answer: B

20. The stem-and-leaf plot (recognizably produced with R) displays the distribution of exam scores in a class of 48 students. Which statement best describes the distribution?

The decimal point is 1 digit(s) to the right of the |

1 | 8
2 | 47
3 | 099
4 | 6678
5 | 0477
6 | 0146799
7 | 01234578
8 | 011223355678
9 | 00017
10 | 00

A) unimodal and negatively skewed  B) unimodal and symmetric
C) unimodal and positively skewed  D) bimodal and negatively skewed
E) bimodal and symmetric          F) bimodal and positively skewed
G) multimodal and negatively skewed H) multimodal and symmetric
I) multimodal and positively skewed J) uniform

Solution. The bin [80,90) is clearly the only mode. Therefore the distribution is unimodal. The left tail is longer than the right tail. Therefore the distribution is negatively skewed.

The information about the placement of the decimal point is something that R includes with its stem-and-leaf plots. In this case it means that the data values that appear in the plot are 18.0, 24.0, 27.0, 30.0, 39.0, and so on.

Answer: A

21. What are the order relationships among the mean, median, and mode of the distribution of exam scores in Problem 20?

A) median < mean < mode  B) median < mode < mean
C) mean < median < mode  D) mean < mode < median
E) mode < median < mean  F) mode < mean < median
G) mode < median = mean  H) mode = median < mean
I) median = mean < mode  J) mean < mode = median
Solution. For an archetypally unimodal negatively skewed distribution, the order relationship is alphabetical—refer to the explanation in the class notes.

Answer: C

22. The mean healthy weight for a 170 cm tall male is 70 kg with a standard deviation of 12.5 kg. A male of that height is considered obese if he weighs 95 kg or more. The mean healthy weight for a 198 cm male is 85 kg with a standard deviation of 16.5 kg. A 198 cm male is considered obese if his standardized weight is the same as the standardized weight of an obese 170 cm male. At what weight in kg is a 198 cm male considered obese?

A) 111  B) 112  C) 113  D) 114  E) 115
F) 116  G) 117  H) 118  I) 119  J) 120

Solution. The threshold for obesity of a 170 cm male is

\[ 90 \text{ kg} = 70 \text{ kg} + 25 \text{ kg} = 70 \text{ kg} + 2 \times 12.5 \text{ kg}, \]

Which, in view of the given information, is the weight that corresponds to a z-score of 2. For a 198 cm male, the weight that has a z-score of 2 is 85 kg + 2 \times 16.5 kg, or 118 kg.

Answer: H

23. The mean lifetime of one brand of brake pads is 50,000 mi with a standard deviation equal to 8,000 mi. What is the time of service that is not reached by about one quarter of the brake pads, but exceeded by about three-quarters of the brake pads?

A) 43,653  B) 43,970  C) 44,287  D) 44,604  E) 44,921
F) 45,238  G) 45,555  H) 45,872  I) 46,189  J) 46,506

Solution. In the table provided on the last page, looking at the row beginning with 0.6 and the columns for 0.07 and 0.08, we see that the 75th percentile corresponds to a z-score of about 0.67 + 0.01 \times (14/31), or 0.6745161. (A more accurate value, which can be obtained using software, is 0.6744897504, but you can see that our approximation using the table is correct to 4 decimal places.) Thus, \( Q_{1} \) exceeds the mean by 0.6745161 \times 8000, or 5396.129. By symmetry, this is the amount by which \( Q_{1} \) falls short of the mean. Therefore, \( Q_{1} = 50000 - 5396.129, \) or 44603.87. (With a calculator, you might have obtained a number closer to 44,604.082, but this rounds to the same integer.)

Answer: D

24. The mean height of Dutch men is 185 cm with a standard deviation of 7.4 cm. The mean height of a northern Italian man is 177 cm with a standard deviation of 7.2 cm. Finn is a Dutchman whose height percentile in the Netherlands (i.e., among Dutchmen) is 85. He is considering emigrating to northern Italy and is wondering whether he would stick out, so to speak, there. What would his height percentile be in northern Italy?

A) 96.7  B) 97.0  C) 97.3  D) 97.6  E) 97.9
F) 98.2  G) 98.5  H) 98.8  I) 99.1  J) 99.4

Solution. In the table provided on the last page, looking at the row beginning with 1.0 and the columns for 0.03 and 0.04, we see that the 85th percentile corresponds to a z-score of about 1.03 + 0.01 \times (5/23), or 1.032174. That means that Finn’s height in cm is 185 \pm 1.032174 \times 7.4, or 192.6381. Among northern Italian men, that
would correspond to a z-score of \((192.6381 - 177)/7.2\), or 2.171958. In the table provided on the last page, looking at the row beginning with 2.1 and the column for 0.07, we see that a z-score of 2.17 corresponds to the 98.5\(^{th}\) percentile.

Solving this problem with software, we find that the 85\(^{th}\) percentile corresponds to a z-score of 1.03643390, so our approximation using the table is off by about 1/5000. Using the slightly more accurate z-score 1.03643390, we obtain 185 + 1.03643390 \times 7.4, or 192.6696071, for Finn’s height. Among northern Italian men, this height corresponds to a z-score of \((192.6696071 - 177)/7.2\), or 2.176334319. Using software, we find that this z-score corresponds to the 98.52348645\(^{th}\) percentile. A calculator computation would have resulted in very similar numbers to the ones just obtained, which is to say, the same answer, ultimately.

(For those interested, Finn was the 11\(^{th}\) most popular boy name in the Netherlands in 2012. Asymmetri-
cally, Dutch did not make the top 50 in Finland.)

Answer: G

25. The following table gives the measurements of two bones, the femur and humerus, for four fossil samples of *Archaeopteryx*.

<table>
<thead>
<tr>
<th>Femur</th>
<th>39</th>
<th>56</th>
<th>59</th>
<th>64</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humerus</td>
<td>41</td>
<td>63</td>
<td>70</td>
<td>72</td>
</tr>
</tbody>
</table>

The sample mean and the sample standard deviation for the femur measurements are 54.5 and 10.84743. The sample mean and the sample standard deviation for the humerus measurements are 61.5 and 14.20094. What is the sample correlation coefficient?

A) 0.967  B) 0.970  C) 0.973  D) 0.976  E) 0.979  
F) 0.982  G) 0.985  H) 0.988  I) 0.991  J) 0.994

**Solution.** The femur z-scores are \((39 - 54.5)/10.84743, (56 - 54.5)/10.84743, (59 - 54.5)/10.84743, (64 - 54.5)/10.84743\), or \(-1.4289099, 0.1382816, 0.4148448, 0.8757835\). The humerus z-scores are \((41 - 61.5)/14.20094, (63 - 61.5)/14.20094, (70 - 61.5)/14.20094, (72 - 61.5)/14.20094\), or \(-1.4435664, 0.1056268, 0.5985519, 0.7393877\). The sample correlation is

\[
\frac{1}{4-1}
\left((-1.4289099)(-1.4435664)+(0.1382816)(0.1056268)+(0.4148448)(0.5985519)+(0.8757835)(0.7393877)\right),
\]

or 0.9910608.

Answer: I
STANDARD STATISTICAL TABLES

1. Areas under the Normal Distribution

The table gives the cumulative probability up to the standardised normal value $z$

\[ P[Z < z] = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{z} e^{-t^2/2} dt \]

<table>
<thead>
<tr>
<th>$z$</th>
<th>0.00</th>
<th>0.01</th>
<th>0.02</th>
<th>0.03</th>
<th>0.04</th>
<th>0.05</th>
<th>0.06</th>
<th>0.07</th>
<th>0.08</th>
<th>0.09</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>0.5000</td>
<td>0.5040</td>
<td>0.5080</td>
<td>0.5120</td>
<td>0.5159</td>
<td>0.5199</td>
<td>0.5239</td>
<td>0.5279</td>
<td>0.5319</td>
<td>0.5359</td>
</tr>
<tr>
<td>0.1</td>
<td>0.5398</td>
<td>0.5438</td>
<td>0.5478</td>
<td>0.5517</td>
<td>0.5557</td>
<td>0.5596</td>
<td>0.5636</td>
<td>0.5675</td>
<td>0.5714</td>
<td>0.5753</td>
</tr>
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