

Started on	Friday, 26 February 2021, 2:05 PM
State	Finished
Completed on	Friday, 26 February 2021, 2:51 PM
Time taken	46 mins 5 secs
Marks	18.00/20.00
Grade	90.00 out of 100.00

Question **1**
Correct
Mark 1.00 out of 1.00

In the titanic dataset, how many columns have numeric dtype?
Provide answer as an integer number.

Answer: ✓

The correct answer is: 7

Question **2**
Correct
Mark 1.00 out of 1.00

In the titanic dataset, how many missing values are there for survived people? Provide answer as an integer number.

Answer: ✓

The correct answer is: 260

Question **3**
Incorrect
Mark 0.00 out of 1.00

In titanic dataset, what is the ratio of survived people to not survived within the 1st class of Passengers ? Select the correct answer.

Select one:

- ☐ a. 1.7
- ☒ b. 1.5 ✖
- ☐ c. 0.6
- ☐ d. 1.1
- ☐ e. 2.7

Your answer is incorrect.

The correct answer is: 1.7

Question **4**

Correct

Mark 1.00 out of 1.00

In the titanic dataset, what is the sum of the average ages for different passenger classes, provide the closest integer? Select the correct answer.

Select one:

- ☐ a. 68.1
- ☒ b. 93.3 ✓
- ☐ c. 29.9
- ☐ d. 63.3
- ☐ e. 38.2

Your answer is correct.

The correct answer is: 93.3

Question **5**

Correct

Mark 1.00 out of 1.00

In titanic dataset, find number of passengers, whose name (first or last) is Johnson, Brown or Goldsmith? Provide answer as an integer number.

Answer: 13



The correct answer is: 13

Question **6**

Correct

Mark 1.00 out of 1.00

In the titanic dataset, after dropping missed values in the Cabin column, find the difference in the number of males and females. Note: perform dropping temporarily, because you need to work with the original dataset in other questions. Provide answer as an integer (positive value) number.

Answer: 10



The correct answer is: 10

Question **7**

Correct

Mark 1.00 out of 1.00

In the titanic dataset, for the Fare value between 40 and 100 (inclusive), find the number of people Embarked from ports C or S . Provide answer as an integer number.

Answer: 119



The correct answer is: 119

Question **8**

Correct

Mark 1.00 out of 1.00

In the titanic dataset, for nonzero Fare values, find the sum of the minimum fare in the 1st Class, the mean fare in the 2nd Class, and the maximum fare in 3rd Class. Provide the closest integer. Select the correct answer.

Select one:

- ☐ a. 536.6
- ☐ b. 92.3
- ☐ c. 537.7
- ☒ d. 95.9 ✓
- ☐ e. 166.2

Your answer is correct.

The correct answer is: 95.9

Question **9**

Correct

Mark 1.00 out of 1.00

In the titanic dataset, select all odd indexes, and calculate the standard deviation of Fare values, then do the same for even indexes. Find the difference in standard deviations. Provide answer as a float number rounding to one decimal place (for example, 20.3).

Answer: 6.5



The correct answer is: 6.5

Question **10**

Correct

Mark 1.00 out of 1.00

In the titanic dataset, find the average Fare within each of the groups Embarked and Gender. Which group has the 3rd lowest average Fare value? Select the correct answer.

Select one:

- ☐ a. females embarked from S
- ☐ b. males embarked from Q
- ☒ c. males embarked from S ✓
- ☐ d. males embarked from C
- ☐ e. females embarked from Q

Your answer is correct.

The correct answer is: males embarked from S

Question **11**

Correct

Mark 1.00 out of 1.00

In the titanic dataset, find the average Age within each of the groups Pclass and Survived. Which group has the 5th highest average Age (i.e. class and survived)? Select the correct answer.

Select one:

- ☐ a. Not Survived people of the 1st Class
- ☐ b. Not Survived people of the 2nd Class
- ☐ c. Survived people of the 1st Class
- ☒ d. Survived people of the 2nd Class ✓
- ☐ e. Not Survived people of the 3rd Class

Your answer is correct.

The correct answer is: Survived people of the 2nd Class

Question **12**

Correct

Mark 1.00 out of 1.00

In the titanic dataset, among females from the first Class, sort by Fare in ascending order. Find the name of a woman in 20th position after sorting? Select the correct answer.

Select one:

- ☐ a. Lurette, Miss. Elise
- ☐ b. Chibnall, Mrs. (Edith Martha Bowerman)
- ☐ c. Lindblom, Miss. Augusta Charlotta
- ☒ d. Bowerman, Miss. Elsie Edith ✓
- ☐ e. Spencer, Mrs. William Augustus (Marie Eugenie)

Your answer is correct.

The correct answer is: Bowerman, Miss. Elsie Edith

Question **13**

Correct

Mark 1.00 out of 1.00

For the given array, replace all odd numbers with 0 and find the natural logarithm of the sum of obtained array. Select the correct answer.

[923, 276, 952, 246, 320, 285, 671, 202, 723, 345, 652, 178, 283, 291, 434, 311, 564, 253, 996, 710, 312, 869, 580, 342, 769, 730, 644, 582, 991, 656, 390, 976, 151, 939, 856, 851, 942, 675, 624]

Select one:

- ☐ a. 9330
- ☐ b. 10.0
- ☒ c. 9.5 ✓
- ☐ d. 13164
- ☐ e. 9.1

Your answer is correct.

The correct answer is: 9.5

Question **14**

Correct

Mark 1.00 out of 1.00

For the given array, reshape it to 5 (rows) by 8 (columns) matrix(with default ordering). If you start counting column number from zero, which column has the highest sum? Provide answer as an integer number.

[352, 246, 565, 636, 655, 899, 427, 249, 174, 257, 357, 578, 361, 802, 795, 670, 192, 784, 317, 154, 972, 689, 381, 741, 793, 723, 483, 432, 879, 245, 801, 163, 233, 925, 667, 884, 793, 280, 418, 632]

Answer:



The correct answer is: 4

Question **15**
Correct
Mark 1.00 out of 1.00

For given two 2D arrays, what is the number of common elements between them? Provide answer as an integer number.

[[62, 13, 56, 29, 23, 76, 27], [63, 28, 74, 69, 41, 72, 17], [10, 13, 41, 59, 86, 91, 86], [13, 27, 87, 52, 27, 33, 10], [29, 73, 37, 1, 90, 97, 98], [97, 89, 16, 21, 58, 71, 37], [28, 45, 57, 27, 95, 32, 61]]

[[61, 6, 80, 47, 23, 3, 45], [25, 49, 91, 35, 73, 89, 95], [58, 79, 67, 78, 11, 87, 72], [38, 39, 98, 89, 83, 2, 64], [84, 67, 4, 26, 99, 9, 77], [90, 43, 14, 86, 32, 62, 63], [54, 56, 12, 23, 1, 47, 78]]


Answer: 

The correct answer is: 18

Question **16**
Correct
Mark 1.00 out of 1.00

For the given array, create its normalized form, whose values range exactly between 0 and 1. To normalize, subtract minimum value from each element of the array, and then divide by the difference between maximum and minimum values. Find sum of the obtained array. Select the correct answer.

[352, 246, 565, 636, 655, 899, 427, 249, 174, 257, 357, 578, 361, 802, 795, 670, 192, 784, 317, 154, 972, 689, 381, 741, 793, 723, 483, 432, 879, 245, 801, 163, 233, 925, 667, 884, 793, 280, 418, 632]

- Select one:
- ☐ a. 20.5
 - ☐ b. 15.9
 - ☒ c. 18.9 
 - ☐ d. 22.2
 - ☐ e. 26.4

Your answer is correct.
The correct answer is: 18.9

Question **17**
Incorrect
Mark 0.00 out of 1.00

For the given array, find 20th, 30th, 60th percentiles. Calculate multiplication of them ($P_{20} * P_{30} * P_{60}$). What is the reminder after the division of obtained number by 1234? Provide answer as the closest integer number.

[352, 246, 565, 636, 655, 899, 427, 249, 174, 257, 357, 578, 361, 802, 795, 670, 192, 784, 317, 154, 972, 689, 741, 483, 879, 245, 801, 163, 233, 925, 667, 884, 793, 280, 418, 632]

Answer: 

The correct answer is: 138

Question **18**
Correct
Mark 1.00 out of 1.00

Find correlation between 2 arrays. Provide answer rounded to 4 numbers after decimal point.

[436, 584, 676, 127, 45, 476, 564, 593, 758, 458, 834, 113, 692, 789, 490, 805, 208, 822, 265, 768, 785, 680, 894, 821, 743, 916, 28, 896, 180, 836]
[214, 430, 454, 804, 329, 952, 38, 994, 288, 548, 214, 56, 620, 335, 209, 876, 580, 165, 678, 315, 343, 192, 184, 781, 921, 710, 217, 787, 639, 262]

Answer: 

The correct answer is: 0.0462

Question **19**
Correct
Mark 1.00 out of 1.00

Find euclidean distance between two arrays. Provide answer as the closest integer number.

[127, 45, 476, 564, 593, 758, 458, 834, 113, 692, 789, 490, 805, 208, 822, 265, 768, 785, 680, 894, 821, 743, 916]
[804, 329, 952, 38, 994, 288, 548, 214, 56, 620, 335, 209, 876, 580, 165, 678, 315, 343, 192, 184, 781, 921, 710]

Answer: 

The correct answer is: 2018

Question **20**
Correct
Mark 1.00 out of 1.00

For the given matrix, firstly sort it along rows and then along columns. Find the element on 4th column and 3rd row. Provide answer as an integer number.

[[10, 64, 83, 128, 129, 55, 93], [63, 135, 78, 151, 111, 93, 16], [84, 3, 69, 21, 98, 99, 105], [81, 50, 126, 9, 61, 44, 35], [121, 145, 35, 31, 14, 103, 92]]

Answer: 

The correct answer is: 84

[◀ Assignment 4](#)

[Dataset Titanic ▶](#)