



Python 101 Quiz 2

Updated May 19, 2023

Python basic, data wrangling, and data analysis.

Total: 24 Points

* Required

Section 1: Python Basics

1. Email: *

2. First Name: *

3. Last Name: *

4. Which of the following is an example of an escape characters? * (1 Point)

- ☐ \c
- ☐ \n
- ☐ \u
- ☐ None of the above

5. Which of the following is the correct syntax of a Lambda function? * (1 Point)

- ☐ lambda(arguments, expression)
- ☐ lambda expression: arguments
- ☐ lambda arguments : expression
- ☐ lambda(expression, arguments)

6. What datatype is this example: True * (1 Point)

- ☐ bool
- ☐ str
- ☐ int
- ☐ char

7. What does this result in: re.split("_", "Memorial_Hermann_Data_Science_Team")? * (1 Point)

- ☐ ["Memorial_", "Hermann_", "Data_", "Science_", "Team"]
- ☐ ["memorial", "hermann", "data", "science", "team"]
- ☐ ["Memorial", "_Hermann", "_Data", "_Science", "_Team"]
- ☐ ["Memorial", "Hermann", "Data", "Science", "Team"]

8. Which the following is required for a Python conditional statement? * (1 Point)

- ☐ if
- ☐ else
- ☐ elif
- ☐ All of them are required for a Python conditional statement

Section 2: Data Ingestion

9. What does the following do? `pd.read_excel("file.xlsx")` * (1 Point)

- ☐ Reads a flat csv file named "file"
- ☐ Reads a flat json file named "file"
- ☐ Reads a flat excel file named "file"
- ☐ Reads a flat text file named "file"

10. Which of the following is a Pandas reader method? * (1 Point)

- ☐ `pd.read_text()`
- ☐ `pd.read_json()`
- ☐ `pd.read_pdf()`
- ☐ `pd.read_file()`

11. Which of the following is a Pandas writer method? * (1 Point)

- ☐ `pd.to_text`
- ☐ `pd.to_sas`
- ☐ `pd.to_csv`
- ☐ `pd.to_file`

12. How do you write to a csv file called "result" with a pipe (|) delimiter? * (1 Point)

- ☐ `pd.to_csv("result.csv")`
- ☐ `pd.to_csv("result.xlsx")`
- ☐ `pd.to_csv("result.csv", sep= "|")`
- ☐ `pd.to_csv("result.xlsx", sep= "|")`

13. Which of the following is NOT a flat file? * (1 Point)

- ☐ filename.csv
- ☐ filename.txt
- ☐ filename.xlsx
- ☐ filename.sql

Section 3: Data Exploration

14. How do you remove empty columns from DataFrame df? * (1 Point)

- ☐ df.dropna(axis=0, how='all')
- ☐ df.dropna(axis=1, how='all')
- ☐ df.dropcol(axis=0)
- ☐ df.drops(axis=1)

15. What does the df.describe() method produce? * (1 Point)

- ☐ Generates a descriptive analysis of the columns with int64 or float64 datatype by default.
- ☐ Generates a descriptive analysis of all columns in the dataframe.
- ☐ Generates a descriptive analysis of the rows with int64 or float64 datatype by default.
- ☐ Generates a descriptive analysis of all text columns in the dataframe.

16. What does df['colA'].unique() return? * (1 Point)

- ☐ A series object that shows the count of unique values in the "colA" column of Dataframe df.
- ☐ A list of unique values from the "colA" column of Dataframe df.
- ☐ A count of unique values from the "colA" column of Dataframe df.
- ☐ A series object of unique values from the "colA" column of Dataframe df.

17. How do you get the count of unique values from column "colB" from Dataframe df?

* (1 Point)

- ☐ `df["colB"].count_unique()`
- ☐ `df["colB"].num_unique()`
- ☐ `df["colB"].nunique()`
- ☐ `df["colB"].unique()`

18. What does `df["colC"].value_counts()` return? * (1 Point)

- ☐ A series containing counts of unique values within column "colC" of Dataframe df
- ☐ A list containing counts of unique values within column "colC" of Dataframe df
- ☐ A dataframe containing counts of unique values within column "colC" of Dataframe df
- ☐ A dict containing counts of unique values within column "colC" of Dataframe df

Section 4: Data Wrangling

19. How to convert a Pandas Series object x to a number or numeric type? * (1 Point)

- ☐ to_number()
- ☐ to_numeric()
- ☐ [pd.to](#)_number(x)
- ☐ [pd.to](#)_numeric(x)

20. Which of the following is the INCORRECT way to use the loc method? * (1 Point)

- ☐ df.loc[:, ['column_one', 'column_two']]
- ☐ df.loc[0, 5]
- ☐ df.loc[0, 'column_one']
- ☐ df.loc[df['column_one'] == 0]

21. What does df.iloc[0:2, 2:4] do? * (1 Point)

- ☐ Selected from a dataframe (df) row indices from 0 to 1 and column indices from 2 to 3.
- ☐ Selected from a dataframe (df) row indices from 0 to 2 and column indices from 2 to 4.
- ☐ Selected from a dataframe (df) column indices from 0 to 1 and row indices from 2 to 3.
- ☐ Selected from a dataframe (df) column indices from 0 to 2 and row indices from 2 to 4.

22. Which of the following concat dataframe df2 to df1? * (1 Point)

- ☐ `pd.concat(df1, df2)`
- ☐ `df1.concat(df2)`
- ☐ `df1 = pd.concat(df2)`
- ☐ `pd.concat([df1, df2])`

23. Which of the following left joins df1 and df2 with df1 as the left dataframe using 'column_one' as joining key? * (1 Point)

- ☐ `pd.merge(df2, df1, how='left', on=['column_one'])`
- ☐ `pd.merge(df2, df1, on=['column_one'])`
- ☐ `df1.merge(df2, how='left', on=['column_one'])`
- ☐ `df1.merge(df2, on=['column_one'])`

Section 5: Data Analysis & Reporting

24. Which of the following fills missing values in Dataframe df with forward fill method?

* (1 Point)

- ☐ df.fillna(method='ffill')
- ☐ df.ffill()
- ☐ df.pad()
- ☐ All the above

...

25. Which method drops duplicate rows from Dataframe df and returns a dataframe without these duplicated rows? * (1 Point)

- ☐ df.drop_duplicate()
- ☐ df.drop_duplicated()
- ☐ df.drop_duplicates()
- ☐ df.drop_duplicate_rows()

26. What does df.groupby() do? * (1 Point)

- ☐ Groups a dataframe by a mapper or dataframe of columns
- ☐ Groups a dataframe by a mapper or Series of columns
- ☐ Groups a Series by a mapper or dataframe of columns
- ☐ Groups a Series by a mapper or Series of columns

27. Which of the following is NOT a data visualization supported by Pandas? * (1 Point)

- ☐ Bar Graph
- ☐ Pie Graph
- ☐ Line Graph
- ☐ All of them are supported by Pandas

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