Quiz 1.3 | Pandas Basics

Due No due date **Points** 8 **Questions** 7 **Time Limit** None

Instructions

The quizzes consists of questions carefully designed to help you self-assess your comprehension of the information presented on the topics covered in the module. Quiz once attempted i.e answered will not be able to attempt the same question again, so please be careful when submitting.

Each question in the quiz is of multiple-choice or "true or false" format. Few maybe having multiple options correct. You will be awarded points accordingly. Each correct or incorrect response will result in appropriate feedback at end when submitted.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	6 minutes	4 out of 8 *

* Some questions not yet graded

Score for this quiz: **4** out of 8 *
Submitted Aug 22 at 5:56pm
This attempt took 6 minutes.

Question 1

1 / 1 pts

Consider a series: X = pd.Series([1,2,3,4]).

Which of the following is/are the correct way(s) of accessing the second element?

- X[1]
- X.loc[1]

X.iloc[1]

Correct!

All of the above

Question 2

Not yet graded / 1 pts

What are the different types of Data Structures in python? ……

Your Answer:

Python has four basic inbuilt data structures namely Lists, Dictionary, Tuple and Set.

Lists: are just like dynamic sized arrays, declared in other languages (vector in C++ and ArrayList in Java). Lists need not be homogeneous always which makes it the most powerful tool in Python.

Tuple: A Tuple is a collection of Python objects separated by commas. In some ways, a tuple is similar to a list in terms of indexing, nested objects, and repetition but a tuple is immutable, unlike lists that are mutable.

Set: A Set is an unordered collection data type that is iterable, mutable, and has no duplicate elements. Python's set class represents the mathematical notion of a set.

Dictionary: in Python is an ordered (since Py 3.7) [unordered (Py 3.6 & prior)] collection of data values, used to store data values like a map, which, unlike other Data Types that hold only a single value as an element, Dictionary holds **key:value** pair. Key-value is provided in the dictionary to make it more optimized.

List, Tuple, Set, and Dictionary are the data structures in python that are used to store and organize the data in an efficient manner.

Question 3

1 / 1 pts

Consider a dataframe X with the following values:

	first	second	third
0	0.463665	4	0.558587
1	0.140855	7	-0.964709
2	0.063975	1	-1.965475
3	0.014659	9	1.374495
4	0.748958	2	0.856264

Which of the following commands' output would give the cells only in the 3rd and 4th row of the third column?

Correct!

- [x] X.iloc[2:4, 2]
- [ ] X.loc[2:4, 'third']

Correct!

- [x] X.loc[2:3, 'third']
- [ ] X.loc[2:3, 3]

Question 4

1 / 1 pts

Consider a dataframe X with the following values:

	col1	col2	col3
row0	1	2	3
row1	5	6	7
row2	9	10	11
row3	13	14	15

What is the expected output when the following command is executed?

```
X[X<8] = 0
```

- Only the columns with values less than 8 is replaced to 0
- Only the rows with values less than 8 is replaced to 0

Correct!

- (selected) All the cells with values less than 8 is replaced to 0
- None of the above

Question 5

1 / 1 pts

One line code for reading of CSV files through pandas. Choose the correct option.

- pd.read.csv('file.csv', header=None, nrows=5)
- pd.readcsv('file.csv', header=None, nrows=5')

Correct!

- (selected) pd.read_csv('file.csv', header=None, nrows=5)
- pd_read_csv('file.csv', header=None, nrows=5)

Question 6

Not yet graded / 1 pts

List all the data types offered by Numpy:

Your Answer:

NumPy has some extra data types, and refer to data types with one character, like `i` for integers, `u` for unsigned integers etc.

Below is a list of all data types in NumPy and the characters used to represent them.

- `i` - integer

- `b` - boolean
- `u` - unsigned integer
- `f` - float
- `c` - complex float
- `m` - timedelta
- `M` - datetime
- `O` - object
- `S` - string
- `U` - unicode string
- `V` - fixed chunk of memory for other type (void)

Question 7

Not yet graded / 2 pts

One line codes for:

1) Select a single column of a subset of columns: …….

2) How will you drop values from rows (axis=0)

Your Answer:

1. selectedColumn = df['Name of the Column to be selected']
2. #If one wants to drop 3rd and 5th row from the same dataframe

df.drop(df.index[2:4], inplace=True)

#If one wants to drop 3rd and 5th row from the data frame and saving it in the new data frame without changing the original data frame

newDf = df.drop(df.index[2:4])

Quiz Score: **4** out of 8