Week 1 Quiz

Total points 28/30

Welcome to Week 1 Quiz. The Quiz consists of 30 questions from multiple topics which were included in the study material. Some questions may require studying certain topics from the web , no support material will be provided for the same, it is upto the participant to study it on their own.

General Guidelines:
1) All Questions are compulsory and thus should be attempted.
2) This quiz is graded and will contribute in the final grading of the course.
3) Violation of the honor code will lead to harsh actions being taken.

Cheers!

0 of 0 points

IMPORTANT!!!

Attempt this Quiz only after you receive the User ID Pass and Password. You'll

recieve by 16th April 10 am

If not recieved by then, mail us at caciitg@gmail.com

Honor Code

1) You can give the quiz only once , using a single ID Pass. Usage of multiple accounts for submission of quizzes will lead to harsh actions being taken.

2) Your answers to quizzes must be your own work.

3) You may not share your solutions to quizzes with anyone else unless explicitly permitted by the mentor. This includes anything written by you, as well as any official solutions provided by the course .

4) You may not engage in any other activities that will dishonestly improve your results or dishonestly improve or damage the results of others.

You can report Honor Code violations by contacting any of the members of Consulting and Analytics Club, IIT Guwahati.

Please Enter you Name *

.....

Please enter your User ID Pass correctly in the following text field (This will be needed for grading) *

.....

Please enter the password alloted along with the User ID by our Team. *

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Please type " I Accept the Honor Code and will not violate it in any possible way" in the following text field. *

.....

SUMMER ANALYTICS 2020

Week 1 Quiz

28 of 30 points

✓ What datatype is the object L ? L = [1, 23, ‘hello’, 1]. * 1/1

- (●) List ✓
- ( ) Dictionary
- ( ) Array
- ( ) Tuple

✓ What is the output of the line of code shown below, if s1= {1, 2, 3}? s1.issubset(s1) * 1/1

- (●) True ✓
- ( ) Error
- ( ) No Output
- ( ) False

✓ What is the output of “hello”+1+2+3 ? * 1/1

- hello123
- hello6
- hello
- (●) Error ✓

✓ What is the result of the following operation: '1,2,3,4'.split(',') * 1/1

- '1','2','3','4'
- (●) ['1','2','3','4'] ✓
- ('1','2','3','4')
- '1234'

✓ Suppose t = (1, 2, 4, 3), which of the following is incorrect? * 1/1

- print(t[3])
- (●) t[3] = 45 ✓
- print(max(t))
- print(len(t))

✓ Suppose you want to join train and test dataset (both are two numpy arrays train_set and test_set) into a resulting array (resulting_set) to do data processing on it simultaneously. How would you join the two arrays? * 1/1

```
train_set = np.array([1, 2, 3])
test_set = np.array([[0, 1, 2], [1, 2, 3]])
resulting_set --> [[1, 2, 3], [0, 1, 2], [1, 2, 3]]
```

- ○ resulting_set = train_set.append(test_set) resulting_set =
- ○ np.concatenate([train_set, test_set]) resulting_set =
- ◉ np.vstack([train_set, test_set]) ✓
- ○ None of these

✓ Which of the following is prominent python “statistics and econometrics library” ? * 1/1

- ○ Bokeh
- ○ Seaborn
- ◉ Statsmodels ✓
- ○ Tensorflow

✓ What is the command to display the first five rows of a dataframe df? * 1/1

- ○ df.describe()
- ◉ df.head() ✓
- ○ df.tail()
- ○ None of the above

✓ Which is the correct representation for missing data? * 1/1

- ○ no-data
- ○ NULL
- ○ 0
- ◉ NaN ✓

✓ Find the output * 1/1

```
i = 0
while i < 3:
    print(i)
    i += 1
else:
    print(0)
```

- ○ 0 1 2 3 0
- ◉ 0 1 2 0 ✓
- ○ 0 1 2
- ○ Error

✓ Point out the wrong statement * 1/1

- ○ Series is 1D labeled homogeneously-typed array
- ○ DataFrame is general 2D labeled, size-mutable tabular structure with potentially heterogeneously-typed columns
- ◉ Panel is generally 2D labeled, also size-mutable array ✓
- ○ None of the above

✓ Which statement is correct? * 1/1

- (●) List is mutable & Tuple is immutable ✓
- ( ) List is immutable & Tuple is mutable
- ( ) Both are Mutable.
- ( ) Both are Immutable

✓ Which of the following is contained in NumPy library? * 1/1

- ( ) n-dimensional array object
- ( ) tools for integrating C/C++ and Fortran code
- ( ) fourier transform
- (●) All of the above ✓

✓ Find the Output * 1/1

```
l=[[1, 2, 3], [4, 5, 6]]
for i in range(len(l)):
        for j in range(len(l[i])):
                l[i][j]+=10
l
```

- No output Error
- [[1, 2, 3], [4, 5, 6]]
- [[11, 12, 13], [14, 15, 16]]
- ◉ ✓

✓ ___is an integer index based method, so you have to specify rows and columns by their integer index to select data from the dataframe. * 1/1

- ◉ iloc ✓
- loc
- Both
- None

✓ Find the Output 1/1

```
word = 'aeioubcdfg'
print(word [:3] + word [3:])
```

- ○ aeoubcdfg
- ◉ aeioubcdfg ✓
- ○ aeiubcdfg
- ○ aeiiubcdfg

✓ Which of the following packages is used for web scraping? * 1/1

- ◉ beautiful soup ✓
- ○ tensorflow
- ○ pytorch
- ○ keras

✓ How would you cast the string variable “a” that is equal to “2” into the integer 2? * 1/1

- ○ castToInt(a)
- ◉ int(a) integer(a) ✓
- ○ castToInteger(a)
- ○

✓ Which of the following is a valid dictionary in Python? * 1/1

- myExample = {‘someItem’=>2, ‘otherItem’=>20}
- myExample = {‘someItem’: 2, ‘otherItem’: 20} ✓
- myExample = (‘someItem’=>2, ‘otherItem’=>20)
- myExample = (‘someItem’: 2, ‘otherItem’: 20)

✓ Find the Output. Edit: Print statement will include () * 1/1

```
count = 1

def doThis():

    global count

    for i in (1, 2, 3):
        count += 1

doThis()

print count
```

- Error
- 4 ✓
- 3
- 0

✗ Assume, you are given two lists: a = [1,2,3,4,5], b = [6,7,8,9]. The task is to create a list which has all the elements of a and b in one dimension. * 0/1

- ○ a.append(b)
- ○ a.extend(b)
- ○ Any of the above
- ◉ None of these ✗

✗ What is the difference between the two data series given below? Assuming we have a data set df = pd.DataFrame(['ff', 'gg', 'hh', 'yy'],[24, 12, 48, 30],columns = ['Name', 'Age','X','Y']) * 0/1

1. df['Name'] and
2. df.loc[:, 'Name']

- ○ 1 is view of original dataframe and 2 is a copy of original dataframe. 2 is
- ○ view of original dataframe and 1 is a copy of original dataframe. Both are
- ◉ copies of original dataframe. ✗
- ○ Both are views of original dataframe

✓ You want to read a website which has url as “www.abcd.org”. Which of the following options will perform this task? * 1/1

- urllib2.urlopen("www.abcd.org")
- requests.get("www.abcd.org")
- (●) Both A and B ✓
- None of these

✓ To read the title of the webpage you are using BeautifulSoup. What is the code for this? Edit: Brackets are missing in the print statement present in the options * 1/1

```
from bs4 import BeautifulSoup
soup =BeautifulSoup(html_doc,'html.parser')
print soup.title.name
```

A)

```
from bs4 import BeautifulSoup
soup =BeautifulSoup(html_doc,'html.parser')
print soup.title.string
```

B) ✓

None of the above

```
from bs4 import BeautifulSoup
soup=BeautifulSoup(html_doc,'html.parser')
print soup.title.get_text
```

C)

✓ We have a multi-class classification problem for predicting quality of wine on the basis of its attributes. The data is loaded in a dataframe “df”.The quality column currently has values 1 to 10, but we want to substitute this by a binary classification problem. You want to keep the threshold for classification to 5, such that if the class is greater than 5, the output should be 1, else output should be .Which of the following codes would help you perform this task? Edit: In all the options there is a typo . quality should be in between ' ' i.e. 'quality'. Please assume the change and continue with the question. * 1/1

	fixed acidity	volatile acidity	citric acid	residual sugar	chlorides	free sulfur dioxide	total sulfur dioxide	density	pH	sulphates	Alcohol	quality
0	7.4	0.70	0.00	1.9	0.076	11	34	0.9978	3.51	0.56	9.4	5
1	7.8	0.88	0.00	2.6	0.098	25	67	0.9968	3.20	0.68	9.8	5
2	7.8	0.76	0.04	2.3	0.092	15	54	0.9970	3.26	0.65	9.8	5
3	11.2	0.28	0.56	1.9	0.075	17	60	0.9980	3.16	0.58	9.8	6
4	7.4	0.70	0.00	1.9	0.076	11	34	0.9978	3.51	0.56	9.4	5

A)
```
Y = df[quality].values
Y = np.array([1 if y >= 6 else 0 for y in Y])
```
✓

B)
```
Y = df[quality].values()
Y = np.array([0 if y >= 6 else 1 for y in Y])
```

None of the above

```
Y = df[quality]
Y = np.array([0 if y >= 6 else 1 for y in Y])
```

C)

✓ Find the Output. Edit: Print statement will include () * 1/1

```
r = lambda q: q * 2
s = lambda q: q * 3
x = 2
x = r(x)
x = s(x)
x = r(x)
print x
```

- (●) 24 ✓
- ( ) 12
- ( ) 48
- ( ) None of the above

✓ Find the Output * 1/1

```
x = ['ab', 'cd']
print(list(map(list, x)))
```

- ( ) [‘a’, ‘b’, ‘c’, ‘d’]
- ( ) [[‘ab’], [‘cd’]]
- (●) [['a', 'b'], ['c', ✓
- ( ) 'd']]

✓ Find the output * 1/1

```
myList = [1, 5, 5, 5, 5, 1]
max = myList[0]
indexOfMax = 0
for i in range(1, len(myList)):
    if myList[i] > max:
        max = myList[i]
        indexOfMax = i

>>>print(indexOfMax)
```

- (●) 1 ✓
- ( ) 2
- ( ) 3
- ( ) 4

✓ Find the Output * 1/1

```
numbers = {}
letters = {}
comb = {}
numbers[1] = 56
numbers[3] = 7
letters[4] = 'B'
comb['Numbers'] = numbers
comb['Letters'] = letters
print(comb)
```

- ○ Error, dictionary in a dictionary can't exist
- ○ 'Numbers': {1: 56, 3: 7}
- ○ {'Numbers': {1: 56}, 'Letters': {4: 'B'}}
- ◉ {'Numbers': {1: 56, 3: 7}, 'Letters': {4: 'B'}} ✓

✓ Which of the following is an invalid statement? * 1/1

- ○ abc = 1,000,000
- ◉ a b c = 1000 2000 3000 ✓
- ○ a,b,c = 1000, 2000, 3000
- ○ a_b_c = 1,000,000

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