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Test Name:	**ACDS Assessment 7: NumPy & Pandas**
Taken On:	3 Mar 2021 03:08:13 EST
Time Taken:	36 min 17 sec/ 270 min
Work Experience:	> 5 years
Invited by:	TTS
Skills Score:	
Tags Score:	NumPy 105/110 Pandas 10/10 Python 50/55 Python 3 50/50 pandas 5/5

96%

120/125

scored in **ACDS Assessment 7: NumPy & Pandas** in 36 min 17 sec on 3 Mar 2021 03:08:13 EST

Recruiter/Team Comments:

No Comments.

	Question Description	Time Taken	Score	Status
Q1	NumPy Arrays > Coding	5 min 39 sec	50/ 50	✓
Q2	Reshaping Arrays > Coding	16 min 54 sec	50/ 50	✓
Q3	NumPy > Multiple Choice	4 min 22 sec	0/ 5	✗
Q4	NumPy > Multiple Choice	3 min 8 sec	5/ 5	✓
Q5	Pandas > Multiple Choice	49 sec	5/ 5	✓
Q6	Pandas > Multiple Choice	2 min 50 sec	5/ 5	✓
Q7	Pandas > Multiple Choice	1 min 42 sec	5/ 5	✓

QUESTION 1

Correct Answer

Score 50

NumPy Arrays › Coding

NumPy | Python 3

QUESTION DESCRIPTION

Complete the function get_n_column.

The function takes in two variables:
arr - a 2d NumPy array
n - the column number to be returned

The function returns an array containing the values of the column specified (zero-based indexing).

You have access to NumPy.

Example

Input:
1
[[1, 2, 3],
 [4, 5, 6],
 [7, 8, 9]]

Output:
[2, 5, 8]

CANDIDATE ANSWER

Language used: **Python 3**

```
import numpy as np
#
# Complete the 'get_n_column' function below.
#
# The function is expected to return an array containing the values in the
specified column n.
# The function accepts following parameters:
#  1. INTEGER n
#  2. 2d numpy array arr

def get_n_column(n, arr):
    # Write your code here
    col_val = arr[:, n]

    return col_val
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 0	Easy	Sample case	Success	10	0.2785 sec	29.9 KB
Testcase 1	Easy	Sample case	Success	10	0.304 sec	29.6 KB
Testcase 2	Easy	Hidden case	Success	10	0.3487 sec	29.9 KB
Testcase 3	Easy	Hidden case	Success	10	0.3139 sec	29.8 KB
Testcase 4	Easy	Hidden case	Success	10	0.3423 sec	29.8 KB

No Comments

QUESTION 2

Correct Answer

Score 50

Reshaping Arrays › Coding

NumPy | Python

QUESTION DESCRIPTION

Complete the function reshape_array. It takes in two variables, x, y, and arr and returns a 2d numpy array reshaped as specified.

Input:
x = the x variable for reshaping
y = the y variable for reshaping
arr = the intial array (not a numpy array)

Output:
A 2d numpy array that is shaped as (x, y).

If the new shape is larger than the elements in arr, add extra zeroes to the array to make the array be able to fit the shape.

You can assume you will not be given an x,y array shape that is too small for the input.

Examples:

Input:

y = 2
x = 3
arr = [1, 2, 3, 4, 5, 6]

Output:

[[1, 2, 3],
 [4, 5, 6]]

Input:
y = 3
x = 2
arr = [1, 2, 3]

Output:

[[1, 2],
 [3, 0],
 [0, 0]]

CANDIDATE ANSWER

Language used: **Python 3**

```
1  import numpy as np
2  #
3  # Complete the 'reshape_array' function below.
4  #
5  # The function is expected to return a numpy array.
6  # The function accepts following parameters:
7  #  1. INTEGER y
8  #  2. INTEGER x
9  #  3. INTEGER_ARRAY arr
10 #
11
12 def reshape_array(y, x, arr):
```

```
    # Write your code here
    if x * y <= len(arr):
        resh_arr = np.reshape(arr,(y,x))
        return resh_arr
    else:
        new_arr = arr + ([0] * ((x * y) - len(arr)))
        print(new_arr)
        resh_arr = np.reshape(new_arr, (y,x))
        return resh_arr
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 0	Easy	Sample case	Success	10	0.292 sec	29.9 KB
Testcase 1	Easy	Sample case	Success	10	0.2959 sec	29.8 KB
Testcase 2	Easy	Hidden case	Success	10	0.2967 sec	29.7 KB
Testcase 3	Easy	Hidden case	Success	10	0.318 sec	29.8 KB
Testcase 4	Easy	Hidden case	Success	10	0.2951 sec	29.8 KB

No Comments

QUESTION 3

Wrong Answer

Score 0

NumPy › Multiple Choice NumPy Python

QUESTION DESCRIPTION

True or false: All elements in a NumPy array must be the same type.

CANDIDATE ANSWER

Options: (Expected answer indicated with a tick)

- ✓ ○ TRUE
- ● FALSE

No Comments

QUESTION 4

Correct Answer

Score 5

NumPy › Multiple Choice NumPy

QUESTION DESCRIPTION

Which of the commands will result in the following array?

```
[[0. 0.]
 [0. 0.]
 [0. 0.]
 [0. 0.]]
```

CANDIDATE ANSWER

Options: (Expected answer indicated with a tick)

- [x] np.zeroes((4,2))
- [ ] np.array([0, 0] * 4)
- [ ] np.array([0, 0]) * np.array([0, 0])
- [ ] np.zeroes((2,4))

No Comments

QUESTION 5

Correct Answer

Score 5

Pandas › Multiple Choice pandas

QUESTION DESCRIPTION

How do we select a single column from a pandas DataFrame? For this questions, assume we are retrieving the column "Name" from the DataFrame "df."

CANDIDATE ANSWER

Options: (Expected answer indicated with a tick)

- [ ] df.get_col("Name")
- [ ] df("Name")
- [x] df["Name"]
- [ ] df.return_column("Name")

No Comments

QUESTION 6

Correct Answer

Score 5

Pandas › Multiple Choice Pandas

QUESTION DESCRIPTION

Assume you have a pandas DataFrame "df." Each row is a state. For each row, there are two columns, "population" and "covid cases."

How would you create a new column, "percent infected," to find out the percentage of the population of each state that has contracted COVID-19?

CANDIDATE ANSWER

Options: (Expected answer indicated with a tick)

- df['percent infected'] = df['population'] / df['covid cases']
- ✓ df['percent infected'] = df['covid cases'] / df['population']
- df.new_column('percent infected', df['covid cases'] / df['population'])
- df.new_column('percent infected', df['population'] / df['covid cases'])

No Comments

QUESTION 7

Correct Answer

Score 5

Pandas › Multiple Choice Pandas

QUESTION DESCRIPTION

True or false: In a pandas series, the index must be an integer. In a NumPy array, it does not.

CANDIDATE ANSWER

Options: (Expected answer indicated with a tick)

- TRUE
- ✓ FALSE

No Comments