

Congratulations! You passed!

Grade received 90% To pass 80% or higher

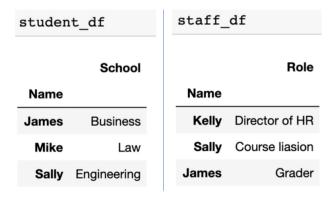
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Quiz 3

Latest Submission Grade 90%

1. Consider the two DataFrames shown below, both of which have Name as the index. Which of the following expressions can be used to get the data of all students (from student_df) including their roles as staff, where nam denotes no role?

1/1 point



- pd.merge(student_df, staff_df, how='left', left_index=True, right_index=True)
- $\bigcirc \ \ pd.merge(student_df, staff_df, how='right', left_index=True, right_index=True)$
- O pd.merge(staff_df, student_df, how='left', left_index=True, right_index=True)
- O pd.merge(staff_df, student_df, how='right', left_index=False, right_index=True)
- **⊘** Correct

Using pd.merge() will select the first DataFrame as the left table and the second DataFrame as the right table. In order to get all records in the student_df, we can put it on the left side of 'left' join.

2. Consider a DataFrame named df with columns named P2010, P2011, P2012, P2013, 2014 and P2015 containing float values. We want to use the apply method to get a new DataFrame named result_df with a new column AVG. The AVG column should average the float values across P2010 to P2015. The apply method should also remove the 6 original columns (P2010 to P2015). For that, what should be the value of x and y in the given code?

1/1 point

```
1 frames = ['P2010', 'P2011', 'P2012', 'P2013', 'P2014', 'P2015']
2 df['AVG'] = df[frames].apply(lambda z: np.mean(z), axis=x)
3 result_df = df.drop(frames,axis=y)
```

- $\bigcirc x = 0$
 - y = 1
- \bigcirc x = 0
- y = 0
- X = 1
- y=1 O x=1
- y = 0
- ✓ Correct

axis = 1 represents columns and axis=0 (the default) represents rows. Since frames represents all column titles, both methods need to act on columns, so both x and y will be 1

3. Consider the Dataframe df below, instantiated with a list of grades, ordered from best grade to worst. Which of the following options can be used to substitute X in the code given below, if we want to get all the grades between 'A' and 'B' where 'A' is better than 'B'?

1/1 point

```
import pandas as pd
df = pd.DataFrame(['A+', 'A', 'A-', 'B+', 'B', 'B-', 'C+', 'C', 'C-', 'D+', 'D'], index=[
my_categories= X
grades = df['Grades'].astype(my_categories)
```

_								
(my_categ	gories=['A+', 'A', 'A-	', 'B+', 'B', 'B-', 'C+', 'C',	'C-', 'D+', 'D'], orde	red=True)				
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✓ Correct								
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	ataFrame df shown in the image bel	vn in the image below ow df ?	. Which of the foll	owing can	return the he	ead of the	pivot	1 / 1 poi
df								
	d_rank	Hans	institution and University	country		ank_Level		
0	1 2	Massachusetts Institute	ard University of Technology	USA	First Tier Top	-		
2	3		ord University	USA	First Tier Top			
3	4	University	of Cambridge Unite	d Kingdom	First Tier Top	Unversity		
4	5	California Institute	of Technology	USA	First Tier Top	Unversity		
pivot table								
	median							
Rank_Level	First Tier Top Unversi	ty Other Top University Se	econd Tier Top Unversi	ty Third Tier	Top Unversity	All		
country	Na	N 44.390	Na	.NI	Nebi	44.390		
Argentina Australia	48.05		49.12		47.285			
Austria	Na	N 44.630	Na	N	47.030	44.690		
Belgium	51.87	25 44.715	49.60	00	46.890	46.210		
Brazil	Na	N 44.365	10.54					
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	This is correct a	as the apply() fu	nction can be use	d to apply	a function al	ong an axis of a	DataFrame.	
								0 / 1 poi
stu	dent_df			staf	f_df			
	First Name	Last Name	School	Fi	irst Name	Last Name	Role	_
0	James	Hammond	Business	0	Kelly	Desjardins	Director of HR	
1	Mike Sally	Smith	Law	1	Sally	Brooks	Course liasion	
2	Sally	Brooks	Engineering	2	James	Wilde	Grader	
used to role?	o get the data o	of all students (f	rom student_df)	and merge	e it with their	staff roles wher	the following can e nan denotes no	be
_			udent_df, how='o udent_df, how='ri			-		
_		_	, staff_df, how='ir	_				
O re	sult_df = pd.m	erge(student_df	, staff_df, how='ri	ght', on=['f	First Name', '	Last Name'])		
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f...:+

202 0

mango	iruit	202.0
potato	vegetable	164.0
onion	vegetable	NaN
broccoli	vegetable	207.0

O df.groupby('class')

O df.groupby('class', axis = 0)

grouped = df.groupby(['class', 'avg calories per unit'])

df.groupby('vegetable')

Orrect

This is incorrect as 'vegetable' is not a valid key. Only the column names are valid keys for this operation.