Data Science for Everyone – Data Wrangling – Joins 3

Dr. Ab Mosca (they/them)

Plan for Today

Look more at keys

 What uniquely links one row in students to one row in hometowns?

student	S			
ID	v	FirstName 💆	LastName 🗖	Year 🔻
	1001	Ab	Mosca	first year
	5006	Sarah	Saydun	sophomore
	9003	Henri	Garrison	sophomore
	8999	Kaden	Paulson	senior

hometowns				
LastName	FirstName	ID 🔻	Town	₩
Paulson	Kaden	8999	Providence, RI	
Saydun	Hanna	7009	Madison, WI	
Mosca	Ab	1001	Manchester, NH	
Garrison	Henri	9003	Jamaica Plain, MA	
Saydun	Sarah	5006	Miami, FL	
Cook	Kaden	9990	Philadelphia, PA	

 What uniquely links one row in students to one row in hometowns?

students						
ID ,	<mark>FirstName</mark>		LastNam	e 🖳	Year :	v
1001	. Ab		Mosca		first year	
5006	Sarah		Saydun		sophomore	
9003	Henri		Garrison		sophomore	
8999	Kaden		Paulson		senior	J.
hometowns	_					
LastName 💆	FirstName	ı ID	▼	Tow	'n	v
Paulson	Kaden		8999	Pro۱	vidence, RI	
Saydun	Hanna		7009	Mad	lison, WI	
Mosca	Ab		1001	Mar	chester, NH	
Garrison	Henri		9003	Jam	aica Plain, MA	
Saydun	Sarah		5006	Mia	mi, FL	
Cook	Kaden		9990	Phila	adelphia, PA	

Neys		K	e	У	<u>ر</u>
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students		•					
ID	₩	FirstName	Ţ	LastNam	e 🔻	Year	▼
10	01	Ab		Mosca		first year	
50	06	Sarah		Saydun		sophomo	re
90	03	Henri		Garrison		sophomo	re
89	99	Kaden		Paulson		senior	
hometowns	S						
LastName	<mark></mark> F	irstName	ı ID	▼	Tow	'n	
Paulson	K	aden		8999	Pro۱	idence, RI	
Saydun	H	lanna		7009	Mad	lison, WI	
Mosca	Α	γp		1001	Mar	chester, N	Н
Garrison	H	lenri		9003	Jam	aica Plain,	MA
Saydun	S	arah		5006	Mia	mi, FL	
Cook	K	aden		9990	Phila	adelphia, P	Α

 What uniquely links one row in students to one row in student-classes?

studer	nts			
ID	▼	FirstName	LastName	Year 🔻
	1001	Ab	Mosca	first year
	5006	Sarah	Saydun	sophomore
	9003	Henri	Garrison	sophomore
	8999	Kaden	Paulson	senior

student-classes					
CRN	₹	Time	¥	Student 📮	
	101	TTh 10am		1001	
	301	TTh 10am		5006	
	333	MWF 9am		8999	
	101	MWF 9am		9003	
	101	MWF 9am		1001	
	301	MW 3pm		8999	

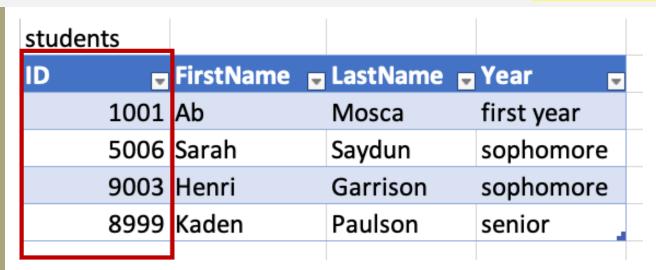
• What uniquely links one row in students to one row in student-classes?

students			
ID 🗔	FirstName 🗖	LastName 🗖	Year 🐷
1001	Ab	Mosca	first year
5006	Sarah	Saydun	sophomore
9003	Henri	Garrison	sophomore
8999	Kaden	Paulson	senior

Studen	t-ciasses	
CRN	□ Time	Student 🗳
	101 TTh 10am	1001
	301 TTh 10am	5006
	333 MWF 9am	8999
	101 MWF 9am	9003
	101 MWF 9am	1001
	301 MW 3pm	8999

student-classes

Keys



studen	t-classes	
CRN	□ Time	₂ Student 🕞
	101 TTh 10am	1001
	301 TTh 10am	5006
	333 MWF 9am	8999
	101 MWF 9am	9003
	101 MWF 9am	1001
	301 MW 3pm	8999

ctudent_classes

 What uniquely links one row in student-classes to one row in classes?

student-classes				
CRN	Time	🖬 Student 🕞		
101	TTh 10am	1001		
301	TTh 10am	5006		
333	MWF 9am	8999		
101	MWF 9am	9003		
101	MWF 9am	1001		
301	MW 3pm	8999		

classes				
CRN	₩	Name 🔻	Time :	7
	101	Intro DS	MWF 9am	
	101	Intro DS	TTh 10am	
	301	Statistics	MW 3pm	
	333	Calculus	MWF 9am	
	301	Statistics	TTh 10am	ļ

student-classes			
CRN	v	Time 🐷	Student 🔻
1	01	TTh 10am	1001
3	01	TTh 10am	5006
3	33	MWF 9am	8999
1	01	MWF 9am	9003
1	01	MWF 9am	1001
3	01	MW 3pm	8999

v	Name 🐷	Time	
101	Intro DS	MWF 9am	
101	Intro DS	TTh 10am	
301	Statistics	MW 3pm	
333	Calculus	MWF 9am	
301	Statistics	TTh 10am	
	101 101 301 333	Name Name	101 Intro DSMWF 9am101 Intro DSTTh 10am301 StatisticsMW 3pm333 CalculusMWF 9am

• Work with 1-2 other classmates on labjoin.Rmd

Your turn