

# Practical 1

## After Class Activity

# Practical 1

<b><u>Before Class</u></b>	<b>Concepts</b>	Intro to Data Visualisation
<b><u>During Class</u></b>	<b>Hands-on</b>	Intro to Data Visualisation + Integration + Tableau Cardinality - Join - Relationship
<b><u>After Class</u></b>	<b>Hands-on</b>	<i>Revise today's class with LMS: Apr/Oct – Week X (...)</i> <i>Do “What is IDL” on LMS</i> <i>Go through Additional Resources slides</i> - <i>Read Extra Resources on Exploratory vs Explanatory</i> - <i>Read website on cardinality Lab Q2</i> - <i>Do “Harry Potter – Which Join should I use?” quiz</i>



# Exploratory vs Explanatory: Takeaways

<https://policyviz.com/2021/03/09/a-schematic-of-data-visualization-type-and-purpose/>

→ Extra Resource on Exploratory vs Explanatory / Static vs Interactive

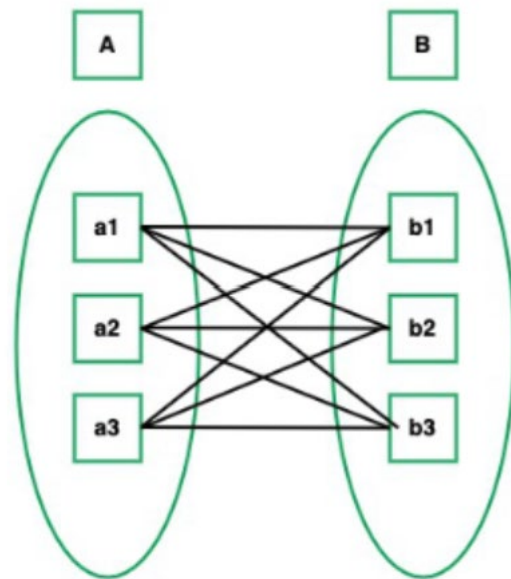
# Cardinality

## P01a Intro to DV: Read this website + Tell us what your takeaway

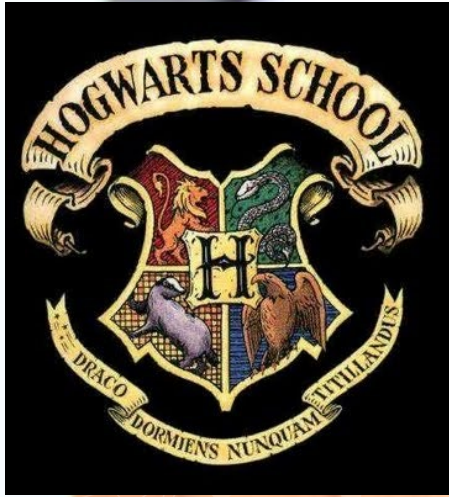
Q2. In database management, cardinality plays an important role. Read this website to see how cardinality affects the way we integrate data tables.

Write down your takeaways.

<https://www.geeksforgeeks.org/cardinality-in-dbms/>







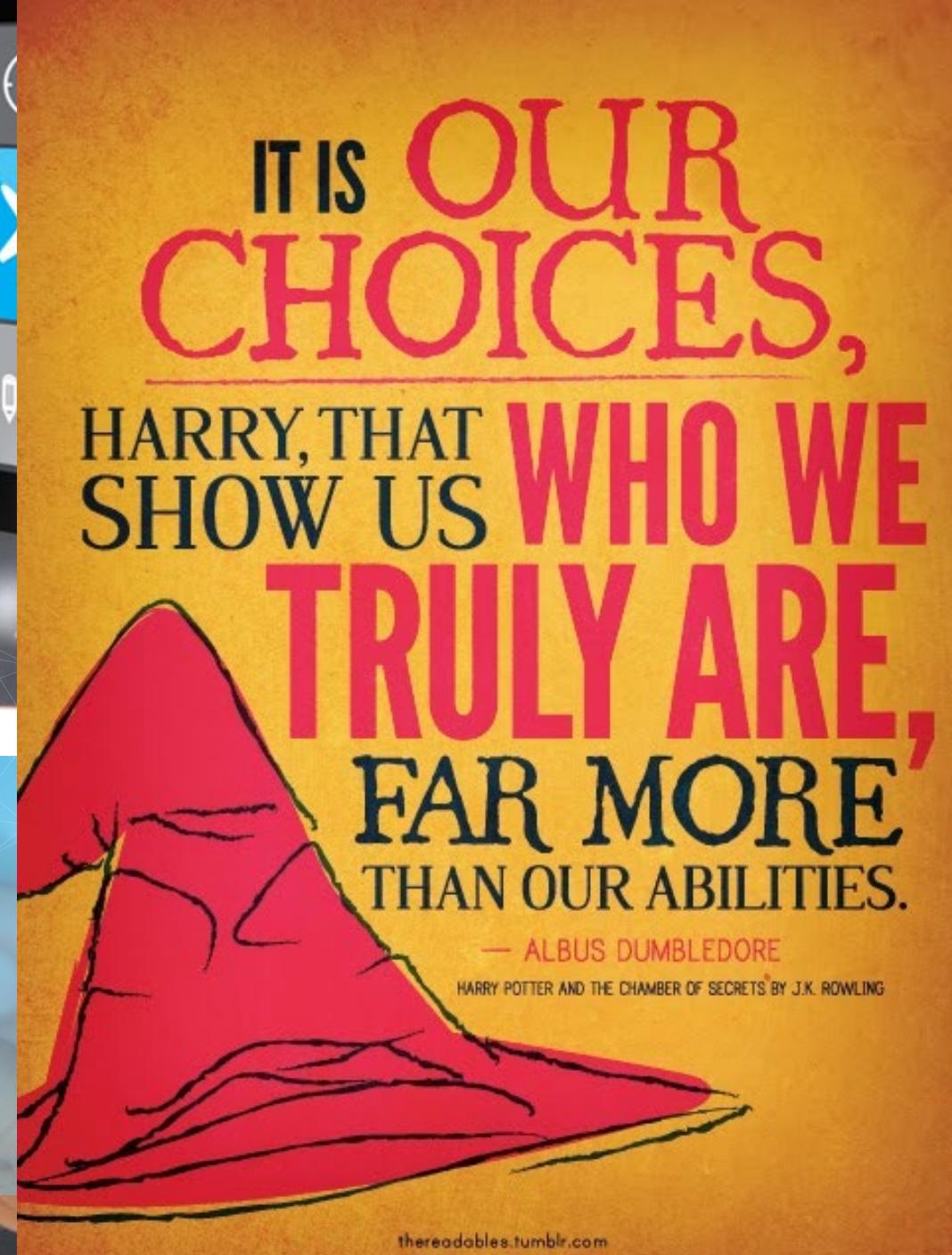
# Harry Potter



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## Reference

<https://towardsdatascience.com/what-is-the-difference-between-an-inner-and-an-outer-join-in-sql-5b5ec8277377>





# Which Join Should You Use?

## Which students will make it to the final joined table?

### Charms Class

Student Name	Charms Grade
Harry	C
Ron	D
Hermione	A
Luna	B
Neville	B

### Potions Class

Student Name	Potions Grade
Harry	A
Ron	C
Hermione	B
Ginny	A
Draco	D



Multiple Choice

- A. Inner Join
- B. Left Join
- C. Right Join
- D. Full Outer Join

### Situation 1

Imagine that a dragon threatens Hogwarts castle. Only the students who are enrolled in both potions class and charms class are allowed to go out with the teachers to defend the school.



# Which Join Should You Use?

## Which students will make it to the final joined table?

### Charms Class

Student Name	Charms Grade
Harry	C
Ron	D
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Student Name	Potions Grade
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Ginny	A
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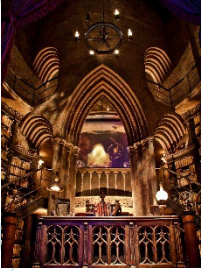
Multiple Choice

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- C. Right Join
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### Situation 2

The Ministry of Magic only hires graduates who have completed both charms class and potions class. However there are not enough students with the required pre-requisites to fill all the roles, so the Ministry of Magic wants a list of students to speak with who are already enrolled in one class.





# Which Join Should You Use?

## Which students will make it to the final joined table?

### Charms Class

Student Name	Charms Grade
Harry	C
Ron	D
Hermione	A
Luna	B
Neville	B

### Potions Class

Student Name	Potions Grade
Harry	A
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Hermione	B
Ginny	A
Draco	D



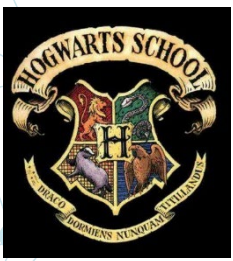
Multiple Choice

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### Situation 3

There has been a prank pulled in the headmaster's office and all of Professor Dumbledore's furniture is floating on the ceiling. Students who take charms class and got a C grade or higher are under suspicion. However, students who are enrolled in potions class could not have been the culprits because their class was on a field trip at the time of the prank.





# Which Join Should You Use?

## Which students will make it to the final joined table?

### Charms Class

Student Name	Charms Grade
Harry	C
Ron	D
Hermione	A
Luna	B
Neville	B

### Potions Class

Student Name	Potions Grade
Harry	A
Ron	C
Hermione	B
Ginny	A
Draco	D

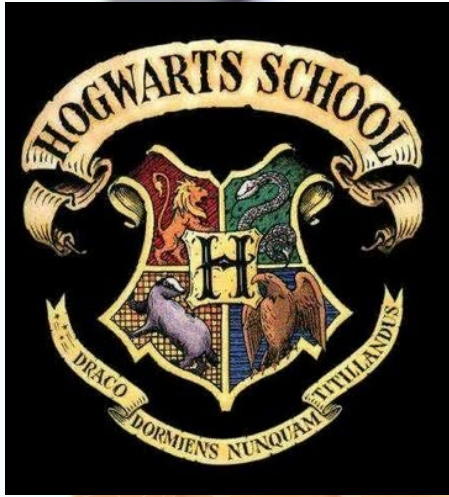


Multiple Choice

- A. Inner Join
- B. Left Join
- C. Right Join
- D. Full Outer Join

### Situation 4

Professor Snape runs a potions club that meets at the same time as the charms class. Only students who are enrolled in potions class but not enrolled in charms class will be available to attend the club.



# The End



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