#### WE ALREADY HAVE A TABLE WITH STUDENT DATA

#### COLUMNS ARE NAMED 'STUDENTID', 'FIRSTNAME', 'LASTNAME', 'GENDER' AND 'EMAIL'

StudentID	FirstName	LastName	Gender	Email
1	Janani	Ravi		janani@loonycorn.com
2	Swetha	Kolalapudi	F	swetha@loonycorn.com
3	Navdeep	Singh	M	navdeep@loonycorn.com
4	Vitthal	Srinivasan	M	vitthal@loonycorn.com

THIS IS A TABLE NAMED 'STUDENTS'

# LET'S SAY WE HAVE ANOTHER TABLE WITH ADDRESS DATA COLUMNS ARE NAMED 'STUDENTID', 'DORMITORYNAME', 'APTNUMBER'

StudentID	DormitoryName	AptNumber
1	Gandhi House	110
2	Akbar Hall	231
3	Gandhi House	345
4	NULL	NULL

THIS IS A TABLE NAMED 'CAMPUS\_HOUSING'

## SO! WE HAVE TWO TABLES NOW

#### THIS IS A TABLE NAMED 'CAMPUS\_HOUSING'

StudentID	DormitoryName	AptNumber
	Gandhi House	110
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## SOME COLUMNS CONTAIN STRINGS..

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# OTHERS CONTAIN NUMBERS..

DormitoryName	AptNumber
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Gandhi House	345
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	Gandhi House Akbar Hall Gandhi House

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## SOME CELLS CONTAIN THE VALUE 'NULL'

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#### THE TWO TABLES ARE LINKED VIA THE COLUMN STUDENTID

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# SO! WE HAVE TWO TABLES NOW

SOME COLUMNS CONTAIN STRINGS

OTHERS CONTAIN NUMBERS

SOME CELLS CONTAIN THE VALUE 'NULL'

THE TWO TABLES ARE LINKED VIA THE COLUMN STUDENTID

# SOME COLUMNS CONTAIN STRINGS OTHERS CONTAIN NUMBERS

## COLUMNS OF TABLES HAVE DATA TYPES

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# OTHERS CONTAIN NUMBERS COLUMNS OF TABLES HAVE DATA TYPES THESE DATA TYPES ARE SPECIFIED WHEN THE TABLE IS CREATED

THESE DATA TYPES GOVERN HOW A COLUMN IS TREATED IN SQL QUERIES

#### CHAR

# USE THE CHAR DATATYPE TO HOLD FIXED LENGTH STRINGS

(AKA CHARACTER)

#### VARCHAR

# USE THE VARCHAR PATATYPE TO HOLD VARIABLE LENGTH STRINGS (ALWAYS BETTER TO USE THIS!)

#### INT

# USE THE INT DATATYPE TO HOLD INTEGER VALUES

(AKA INTEGER)

#### DATETIME

# USE THE PATETIME PATATYPE TO HOLD PATE+TIME VALUES

(AKA TIMESTAMP)

#### DATE

# USE THE DATE DATATYPE TO HOLD DATE VALUES (WITHOUT A TIME)

#### TIME

# USE THE TIME PATATYPE TO HOLD TIME VALUES (WITHOUT A PATE)

#### DECIMAL

# USE THE DECIMAL DATATYPE TO HOLD FLOATING POINT VALUES

(AKA DEC)

#### BLOB

# USE THE BLOB DATATYPE TO HOLD BINARY LARGE OBJECTS

(EG OBJECTS)