SQL CREATE TABLE STATEMENTS

FLASHBACK: WE SPOKE ABOUT FETCHING DATA FROM TABLES USING SELECT..

..BUT INTENTIONALLY GLOSSED OVER HOW THE DATA GOT THERE IN THE FIRST PLACE

LET'S SAY WE HAVE A TABLE WITH STUDENT DATA

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

StudentID	FirstName	LastName	Gender	Email
1	Janani	Ravi	F	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'

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THIS IS A TABLE NAMED 'STUDENTS'

THE COLUMNS ARE NAMED 'STUDENT ID', 'FIRSTNAME', 'LASTNAME', 'GENDER' AND 'EMAIL'

THIS DATA IS SITTING IN A DATABASE SOMEWHERE

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HOW DO WE GET DATA OUT OF THIS TABLE?

FLASHBACK: WE ALSO SPOKE ABOUT TWO RELATED TABLES..

..BUT INTENTIONALLY GLOSSED OVER EXACTLY WHAT THAT RELATIONSHIP WAS

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'

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

THE TWO TABLES ARE LINKED VIA THE COLUMN STUDENTID

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FLASHBACK: WE SPOKE ABOUT HOW COLUMNS IN TABLES HAVE DATA TYPES

..BUT INTENTIONALLY GLOSSED OVER EXACTLY HOW THOSE TYPES ARE SPECIFIED

SO! WE HAVE TWO TABLES NOW

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SOME COLUMNS CONTAIN STRINGS..

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OTHERS CONTAIN NUMBERS..

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SOME CELLS CONTAIN THE VALUE 'NULL'

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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

COLUMNS OF TABLES HAVE DATA TYPES

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VARCHAR

DECIMAL

DATETIME

DATE

INT

BLOB

TIME

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ALL OF THIS WILL MAKE SENSE AFTER WE TALK ABOUT TABLE CREATION

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LET'S SAY WE HAVE A TABLE WITH STUDENT DATA

IT BEARS REPEATING - THE IDEA OF RELATIONAL DATABASES IS THAT DATA IS ARRANGED INTO TABLES.

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THIS DATA IS SITTING IN A DATABASE SOMEWHERE

SOMEBODY PUT IT THERE - LET'S TALK ABOUT HOW IT GOT THERE

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OKEY-DOKEY - SO HOW CAN WE CREATE DATABASES AND TABLES, AND PUT STUFF INTO THEM?

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THIS IS ACTUALLY A REALLY SIMPLE SQL STATEMENT.

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CREATE DATABASE ExampleDB
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EG IF YOU CREATE A TABLE AND PUT STUFF IN IT, THAT TABLE WILL RESIDE INSIDE EXAMPLEDB

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THAT GETS US TO THE SQL CREATE TABLE STATEMENT FOR A TABLE LIKE THIS..

StudentID	FirstName	LastName	Gender	Email

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CREATE TABLE Students
(
StudentID INT NOT NULL AUTO_INCREMENT,
FirstName VARCHAR(30) NOT NULL,
LastName VARCHAR(30) NOT NULL,
Gender CHAR(1),
Email VARCHAR(30) NOT NULL,
PRIMARY KEY (StudentID)
)
```

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START WITH THE NAME OF THE TABLE

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THEN SPECIFY EACH COLUMN NAME, ONE AT A TIME

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