

database management system is one of the most used technique but why do we need to manage our data and where this data comes from so if you see everywhere we are actually generating data to manage those data we need to have a proper database management tools so keep that in mind we came up with a tutorial where we will learn about sql and that will help you to manage your data so let's get started let's get started and let's have a look at what agenda we have for this tutorial so first we will have a look at what is database right and what are the example of databases we have now we will come up to why do we need database and what is database management system and how this database and database management system are related to each other then we will have a look at the history of database management system then we will have a look at what are the most used database softwares we have and then we will jump into the types of database systems then we will have a look at what are the advantages if we go for using database management system lastly we will have a look at what is relational database management system and what's the difference between dbms versus normal traditional file system and we will also have a look at what is the difference between dbms versus relational database management system then we will have a look at the key concerns concepts we have in RDBMS. In that time, if you want to have a look at what are the books you have and what is the count of your book and what are the domain or genre you have in your library, in that time, you need to have a database because in a library, you will have millions of books and maintaining them in a traditional way, you need to have is not possible so that time the database is coming to the picture and the database can help you to maintain your data or for millions of books now let's have a look at what is database management systems so basically a database management system which is called as dbms is basically a software where you can store retrieve define and manage your data in a database so basically we need this system to manage our data to retrieve data from a huge numbers of data and you can manage and define your data as well right now let's have a look at what is the history of database management system how it came into the picture so basically in 1960 charles batchman designed first dbms system and then 1970 got introduced ibm's information management system that is known as ims so then 1976 peter chen coined and defined the entity relationship model also known as er model then in 1980 relational model becomes a widely accepted database component then the revolution comes in 1985 the object oriented dbmf develops then a huge uh development again in database management system then in 1990s in incorporation of object oriented in relational dbms then in 1991 microsoft ships in this access a personal dbms and that displaces all other personal dbms products in 1995 first internet database applications and in 1997 xml applied to database processing many vendors begin to integrate xml into database or dbms management system products right now let's have a look at what is the most used database management systems we have these are the software we use to manage our data we have mysql we have oracle then we have postgre sql then sq light we also have mario db that is also similar to mysql and we also have some other examples as well now we will have a look at what is database management system, right? So the examples of DBMS is basically XML files and file systems, but for the RDBMS, we have MySQL, SQL Server, Oracle, Postgre, etc. So, composite key consists of greater than one attribute to uniquely classify rows or records and tuple in a table. So, now we will have a look at the difference between DBMS versus file system and why should you integrate your database to DBMS and

what are the features and advantages we get when we use DBMS, right?Whereas, DBMS is efficient to use as there are large varieties of techniques to store and retrieve the data.So, candidate key is also a set of one or more columns or attributes to uniquely classify rows in a table.So, I already informed that relational database management system is one of the DBMS way that it will help you to make your data is like more easily accessible and there are lots of features we have for our DBMS.So, basically primary key concepts is a technique to classify unique tables or rows in a table, right?A super key is a set of one or more columns or attributes to uniquely classify rows in a table.The all remaining attributes or columns except for the primary key are considered as a candidate key.Whereas, combination of various candidate keys make the criteria to choose the primary keys.Whereas, candidate key's attributes can also contain null values.If it did, consider trying out our pro version on goodtape.io: – All your transcriptions* – Skip the queue = minimal waiting time – We will store your transcriptions (including this one) safely *) Well, up to 20 hours/month, which is kind of a lot.Lastly, we will see how can you use pattern matching concepts in MySQL.A database is a database that is based on a container where a data can be collected systematically.Each column can have a common name and the integrity constants help to maintain the data consistency for multiple tables.So, DBMS is a collection of data but user is not required to write the procedures to manage the databases.So, this is why DBMS is accepted all over the world because of its flexibility and large varieties of techniques.But, whereas, DBMS, in the case of DBMS, if you have a crash recovery option, we already have a crash recovery option which protects the user from the effects of system failure.This technique is used for identifying the unique rows from table and also help to establish relationship among the tables.I will show you how can you actually make a big data set into converting them into RDBMS and how it's going to help you to retrieve your data, to manipulate your data, right?So, we have primary key, we have super key, candidate key, alternate key, composite key, and foreign key.There is no repeated data in your dataset and that's how it makes your dataset more constructed and more structured, right?So, if you want to make primary key using two column or two attributes like maybe student ID and name, that can also be done using the two columns, right?Normalization is the process of organizing data to avoid duplication and redundancy.To simplify the queries also, we use normalization techniques.It should contain a primary key that identifies all the rows as a unique data.Maybe Raj is enrolled for two courses that is CR001 and CR005.You can see your data or your table has changed after using the one NF concepts that it has two rows for Raj.So, whenever you are going for using two NF rules for your database be sure your database is already in one NF. So, this is the first and foremost criteria whenever you are going to use second normal form to your data.If you need to transcribe more let us know on yourfriends@goodtape.ioThen, we will also have look at what are the types of key we have in RDBMS, the relational database management system.Then, we will see how can you filter your data in MySQL and what are the operators we have in MySQL.Managing and manipulating data with the concept of database are very easy.So, basically relational database management system which is in short known as RDBMS is used for database management system that we all know.And there are lots of other properties also there in RDBMS and that will basically help you to have a proper structured way to solve your or to store your data, right?So, whenever you want to manage your database, that time DBMS has its own features which will actually help you to proceed

your data. In the case of DBMS, this is also a collection of data but user is not required to write the procedures to manage the data. So, DBMS basically helps you to reduce the human effort and it is more of an automatic task. File systems are not efficient for storing and retrieving of data. If you want to go for Excel, when you have a huge number of data, from that data, if you want to retrieve your data, if you save your data, then it reduces your data quality. But, in the case of RDBMS, the table has a classifier known as primary key. And then, the data values are stored in a tabular format. So, in the case of DBMS, the normalization is not needed for the database. And it also supports multiple users. So, key concepts has an important role in relational database management system. So, if you go for using a primary key, it will help you to make sure that your data, whatever data you have in your database, they are quietly unique, right? So, primary key does not contain null value. And primary keys are not always to be single attribute or column. So, whenever you are going to use primary key concepts for your data set, you have to make sure that which column making your data more unique, right? How can you use primary key for your table and make your data more constructed and more structured? So, combination of various super keys make the criteria to choose the candidate keys. Now, let's have a look at the super keys attribute can contain null values. So, alternate key is out of all the candidate keys, only one gets null. So, candidate key is selected for primary key. Foreign keys are the columns of a table which refers to the primary key or another table. So, normalization rules are divided into few categories. The primary key is usually a single column but if needed then more than one column can be combined to create a single primary key that we already know. So, first row will contain the first course he has enrolled for and the second rows you can see. So, in that case your columns or your rows are basically increased because you are putting each and every data in different rows. And here you can see after implementing the first normal form maybe the data redundancy increases but each row as a whole will be unique. We hope our transcription made your workday more enjoyable. Then, we will look at what is normalization and why do we need normalization and what are the types of normalization we have in SQL. Then, we will have a brief look about what is SQL stands for and how can you install SQL in your local system. Then, types of commands we are going to use in MySQL to maintain your data, to manage your data. What are the examples of databases we have? First, suppose you have an online telephone directory. If you need to maintain that online telephone directory, how can you do that? This is where the database concepts comes into the picture. Let's have a look at the other examples of database. So, first let's have a look at what is a relational database management system. Now, we will have a look at what is basically stands for and what are the properties we have for RDBMS. The relationship between the data files is relational in RDBMS. So, let's see what is a relational database management system. So, let's have a look at what are the properties we have for RDBMS. So, we have values are atomic in RDBMS. So, these are the properties we have for RDBMS. Whenever you are going to make your data stored in file system or you want to manage them, you need to have a manual effort. Well, or if you want to find a data from Excel, it is quite time-consuming and quite difficult. Example, while we are entering some data into the file, if the system crashes, then the content of that file will be lost. Whereas, DBMS has its own security process to save the data. Now, let's have a look at what is the difference between DBMS and RDBMS. In the case of RDBMS, stores the data in a tabular form. In DBMS, data is stored in two way. One is hierarchical form

and or a navigational form. So, these are the main two key points and the cache for RDBMS. So, primary key helps you to make your data less redundant. And your data most compact and in a structured way. Let's talk about the concepts of normalization. So, normalization is the most important part whenever we are going for the storing our data. Why normalization is required when you go for storing your data? And in the case of RDBMS, you need to follow all the normalization rules to store your data. Now, let's have a look at DBMS does not have any security for data manipulation. But in the case of RDBMS, it has the integrity constraint for the purpose of ACID. So, in DBMS, there are no relations between the tables. It also supports single user. So I hope you can understand what's the difference between DBMS and RDBMS. So we will see what are the key concepts we have in DBMS. Now, we will have a look at each of them differently and particularly and we will take an example for each of them and we will try to understand how this key concepts are working under this RDBMS. If you are going to give a repeated value for a primary key, that is not going to take your data. And it can be also be a set of more than one attributes or column. So, if you look at the table, so basically attributes are the column name. So, whenever you are trying to work with DBMS, there are some words or some keywords will come into your way which maybe make you confused. So, when it comes to attributes, these attributes are basically your column name, right? If you look at the table more closely, you can see the name can be repeated, right? So, super key is a superset of candidate key. But in the case of name and student ID, again, that will make sure your data is not redundant or your data is not duplicate. So, you can combine both of them, that student ID and name, and you can make a super key, okay? The candidate keys are also as strong as the primary key, right? So, if you look at the table, we have four attributes or four column names. So, in that case, except student ID, your passport number and license number also be a part of candidate key, right? And raised keys are known as alternate or secondary keys. So, you can see we have candidate key like student ID, passport number and license number. But in the case of passport number and license number, this is also a candidate key. So, none of the column can perform as a primary key. So, in the student table, we have attributes like student ID, name, passport number and license number. So, I was saying that normalization is one of the most useful process and most wanted process whenever you are going to store your data in database management system. It helps to minimize duplicate data. Also, it try to minimize or avoid data modifications issues. What types of normalization techniques we have? So, let us have a look at what are the categories we have for normalization. And lastly, we have voice and code normal form that is DCNF. What are the types of normalization we have or the categories we have. It also helps to prevent using the multiple columns to face the same row. Now, you can see in the first table we have two courses under Raj. But whenever we go for using our first NF or first normal form that time we are not allowed to have more than one value in one column. So, in that case you need to make two rows for Raj. It will contains the second course he had enrolled for. Then, we will have a look at the difference between super key and candidate key. Then, we will have a look at the data types we have in MySQL. Now, we will have a look at what is database. Now, let's have a look at why do we need database. That time, you need to have a database where you can store your data. The data is like name, address, and ??password.tournament. Okay? Okay? Okay