**Assignment 3**

* **What is RDBMS ?**
* RDBMS stands for Relational Database Management System.
* RDBMS is the basis for SQL, and for all modern database systems like MS SQL Server, IBM DB2, Oracle, MySQL, and Microsoft Access.
* A Relational database management system (RDBMS) is a database management system (DBMS) that is based on the relational model as introduced by E. F. Codd.
* Most of today's databases are relational:
* database contains 1 or more tables
* table contains 1 or more records
* record contains 1 or more fields
* fields contain the data
* tables are related (joined) based on common fields
* **What is SQL**
* SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in relational database.
* SQL is the standard language for Relation Database System.
* All relational database management systems like MySQL, MS Access,Oracle, Sybase, Informix, postgres and SQL Server use SQL as standard database language.
* Also, they are using different dialects, such as:

MS SQL Server using T-SQL, ANSI SQL

* Oracle using PL/SQL, MS Access version of SQL is called JET SQL (native format) etc.
* SQL stands for Structured Query Language
* SQL allows you to access a database
* SQL is an ANSI standard computer language
* SQL can execute queries against a database
* SQL can retrieve data from a database
* SQL can insert new records in a database
* SQL can delete records from a database
* SQL can update records in a database
* SQL is easy to learn
* SQL is written in the form of *queries action* queries insert, update & delete data *select* queries retrieve data from DB

* **Write SQL Commands**
* **DDL - Data Definition Language:**
* Create
* After
* drop
* **DQL – Data Query Language**
* Select
* **DML – Data Manipulation Language**
* Insert
* Update
* Delete
* **DCL – Data Control Language Command**
* Grant
* Revoke
* **What is join and its typs?**
* **Inner Join Syntax:**
* The most frequently used and important of the joins is the INNER JOIN.
* They are also referred to as an EQUIJOIN.
* **Left Join Syntax:**
* The SQL **LEFT JOIN** returns all rows from the left table, even if there are no matches in the right table.
* This means that if the ON clause matches 0 (zero) records in right table, the join will still return a row in the result, but with NULL in each column from right table.
* **Right Join Syntax:**
* The SQL **RIGHT JOIN** returns all rows from the right table, even if there are no matches in the left table.
* This means that if the ON clause matches 0 (zero) records in left table, the join will still return a row in the result, but with NULL in each column from left table.
* **Full Join Syntax:**
* The SQL FULL JOIN combines the results of both left and right outer joins.
* The joined table will contain all records from both tables, and fill in NULLs for missing matches on either side.
* **How Many constraint and describes it self**
* **NOT NULL :**
* Ensures that a column cannot have a NULL value
* **UNIQUE:**
* Ensures that all values in a column are different
* **Primary key** : A combination of a NOT NULL and UNIQUE. Uniquely identifies each row in a table
* **Foreign key** :
* Prevents actions that would destroy links between tables
* **Check:**
* Ensures that the values in a column satisfies a specific condition
* **Default:**
* Sets a default value for a column if no value is specified
* **Create index:**
* Used to create and retrieve data from the database very quickly
* **Difference between RDBMS vs DBMS** :

|  |  |
| --- | --- |
| **DBMS**   * DBMS applications store data as file * In DBMS, data is generally stored in either a hierarchical form or a navigational form. * **Normalization is not** present in DBMS. * DBMS does **not apply any security** with regards to data manipulation. * DBMS uses file system to store data, so there will be **no relation between the tables.** | **RDBMS**   * RDBMS applications store   Data in a tabular form   * In RDBMS, the tables have an identifier called primary key and the data values are stored in the form of tables. * **Normalization is** present in RDBMS. * RDBMS **defines the integrity constraint** for the purpose of Atomocity, Consistency, Isolation and Durability property. * In RDBMS, data values are stored in the form of tables, so a **relationship** between these data values will be stored in the form of a table as well. |

* **What is API Testing :**
* Application Programming Interface (API) is a software interface that allows two applications to interact with each other without any user intervention another definition , API (Application Programming Interface) is a computing interface which enables communication and data exchange between two separate software systems.
* The purpose of API Testing is to check the functionality, reliability, performance and security of the programming interfaces.
* In API Testing, instead of using standard user inputs(keyboard) and outputs, you use software to send calls to the API, get output, and note down the system’s response.
* API tests are very different from GUI Tests and won’t concentrate on the look and feel of an application.
* **Types of API Testing**
* There are mainly 3 types of API Testing
* Open APIs: These types of APIs are publicly available to use like OAuth APIsfrom Google.
* It has also not given any restriction to use them.
* So, they are also known as Public APIs.
* Partner APIs: Specific rights or licenses to access this type of API because they are not available to the public.
* Internal APIs: Internal or private. These APIs are developed by companies to use in their internal systems. It helps you to enhance the productivity of your teams.
* **What is Responsive Testing?**
* A responsive web design involves creating a flexible web page that is accessible from any device, starting from a mobile phone to a tablet.
* Furthermore, a responsive web design improves users’ browsing experience.
* Considering this from a quality assurance perspective, a responsive web design requires thorough evaluation using a variety of devices before it is ready to go live.
* Software testers may find it challenging to perform responsive design testing as
* a variety of factors are to be looked into during the testing phase.
* Some points to be understand for Responsive Testing.
* The challenges involved in testing a responsive website
* How website testing differs from a mobile device to a computer
* Rules and guidelines to be followed during responsive design testing and
* Lastly, various tools available to perform responsive testing
* **Which types of tools are available for Responsive Testing**
* LT Browser
* Lembda Testing
* Google Resizer
* I am responsive
* Pixel tuner
* **What is the full form of .ipa, .apk**
* .ipa :ios package app store
* .apk:android package kit
* **How to create step for to open the developer option mode ON?**
* go to setting
* then go to about phone
* then click on version
* then click on developer option
* then click on developer option on