Oracle:

Oracle database is a relational database management system (RDBMS) from Oracle Corporation.

What is a database?:

A database refers to the organized collection of structured data stored electronically in a device. It allows us to access, manage, and find relevant information frequently.

Some other popular relational databases are [MySQL](https://www.javatpoint.com/mysql-tutorial)

, [DB2](https://www.javatpoint.com/what-is-db2)

, [SQL Server](https://www.javatpoint.com/sql-server-tutorial)

, [PostgreSQL](https://www.javatpoint.com/postgresql-tutorial).

What is the Oracle database?

Oracle database is a relational database management system. It is also called **OracleDB**, or simply **Oracle**. It is produced and marketed by **Oracle Corporation**. It was created in **1977** by **Lawrence Ellison** and other engineers. It is one of the most popular relational database engines in the IT market for storing, organizing, and retrieving data.

# SQL:

SQL (Structured Query Language) is used to perform operations on the records stored in the database, such as updating records, inserting records, deleting records, creating and modifying database tables, views, etc.

SQL is not a database system, but it is a query language.

Suppose you want to perform the queries of SQL language on the stored data in the database. You are required to install any database management system in your systems, for example, [Oracle](https://www.javatpoint.com/oracle-tutorial), [MySQL](https://www.javatpoint.com/mysql-tutorial), [MongoDB](https://www.javatpoint.com/mongodb-tutorial), [PostgreSQL](https://www.javatpoint.com/postgresql-tutorial), [SQL Server](https://www.javatpoint.com/sql-server-tutorial), [DB2](https://www.javatpoint.com/db2-tutorial), etc.

## Why SQL?

Nowadays, SQL is widely used in data science and analytics. Following are the reasons which explain why it is widely used:

* The basic use of SQL for data professionals and SQL users is to insert, update, and delete the data from the relational database.
* SQL allows the data professionals and users to retrieve the data from the relational database management systems.
* It also helps them to describe the structured data.
* It allows SQL users to create, drop, and manipulate the database and its tables.
* It also helps in creating the view, stored procedure, and functions in the relational database.
* It allows you to define the data and modify that stored data in the relational database.
* It also allows SQL users to set the permissions or constraints on table columns, views, and stored procedures.

# SQL Syntax

When you want to do some operations on the data in the database, then you must have to write the query in the predefined syntax of SQL.

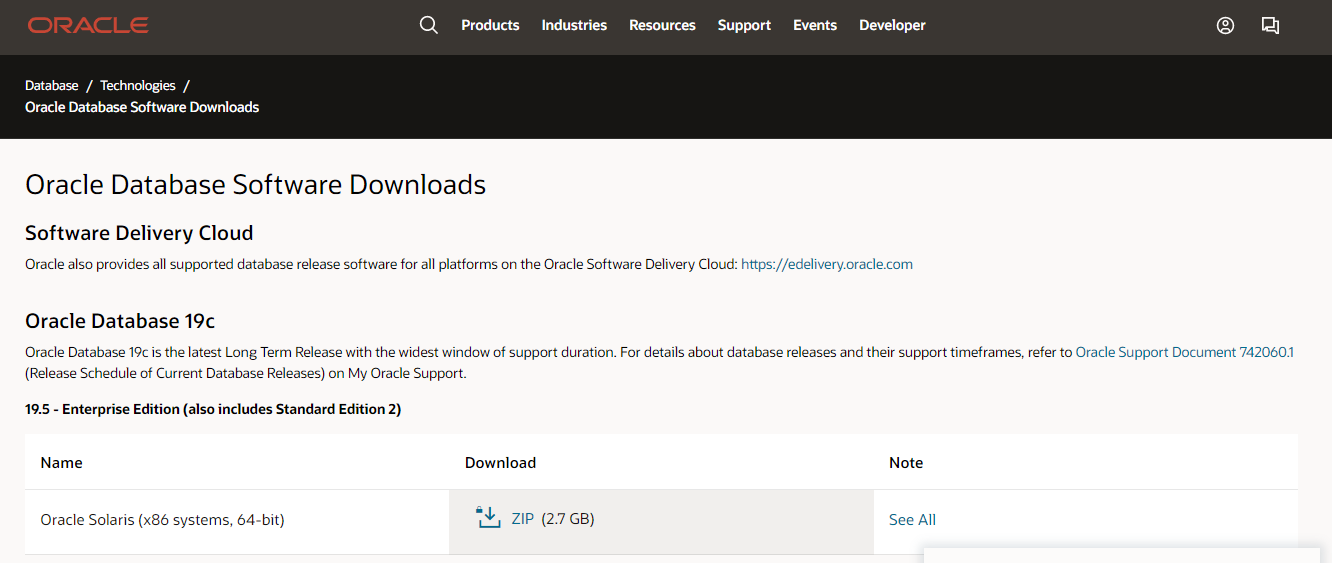
The syntax of the structured query language is a unique set of rules and guidelines, which is not case-sensitive. Its Syntax is defined and maintained by the ISO and ANSI standards.

Following are some most important points about the SQL syntax which are to remember:

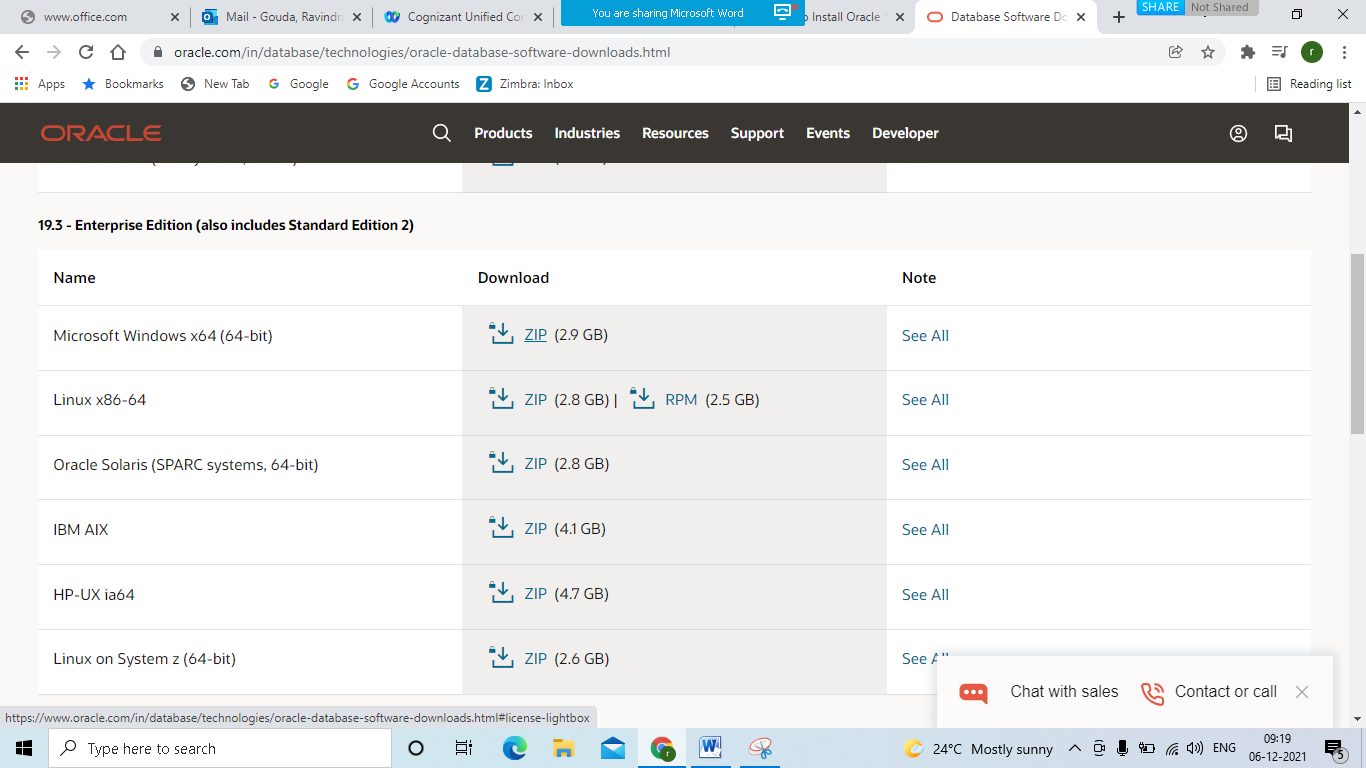
* You can write the keywords of SQL in both uppercase and lowercase, but writing the SQL keywords in uppercase improves the readability of the SQL query.
* SQL statements or syntax are dependent on text lines. We can place a single SQL statement on one or multiple text lines.
* You can perform most of the action in a database with SQL statements.
* SQL syntax depends on relational algebra and tuple relational calculus.

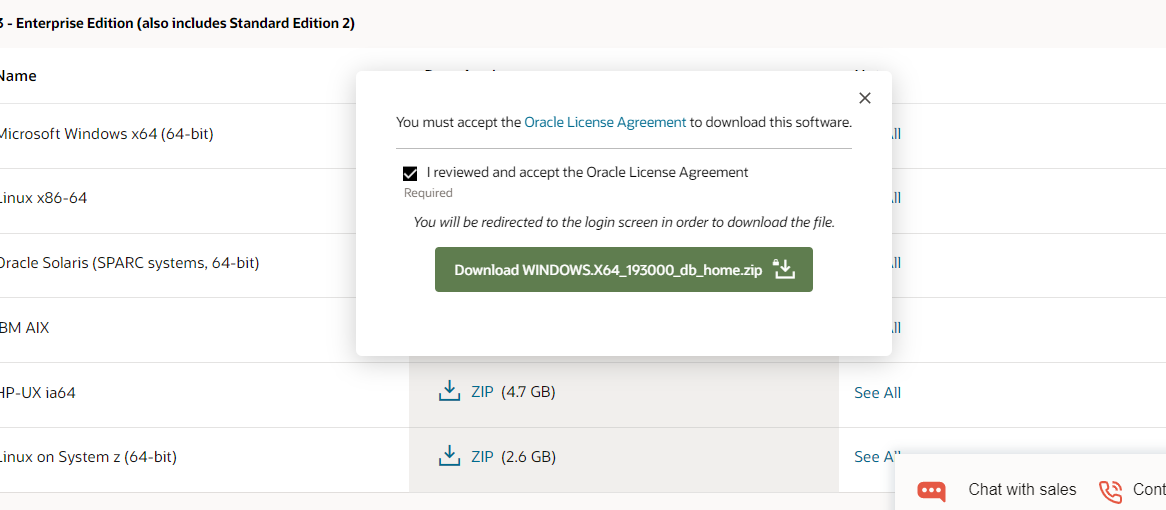
Oracle and SQL Developer installation:

Open chrome and enter oracle database download



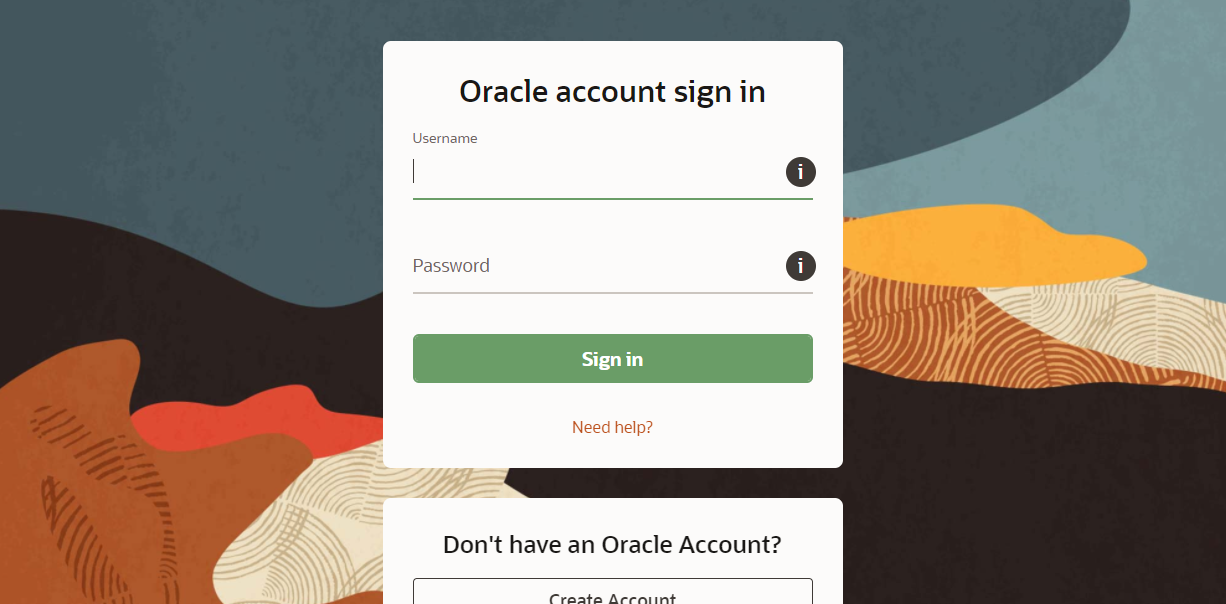
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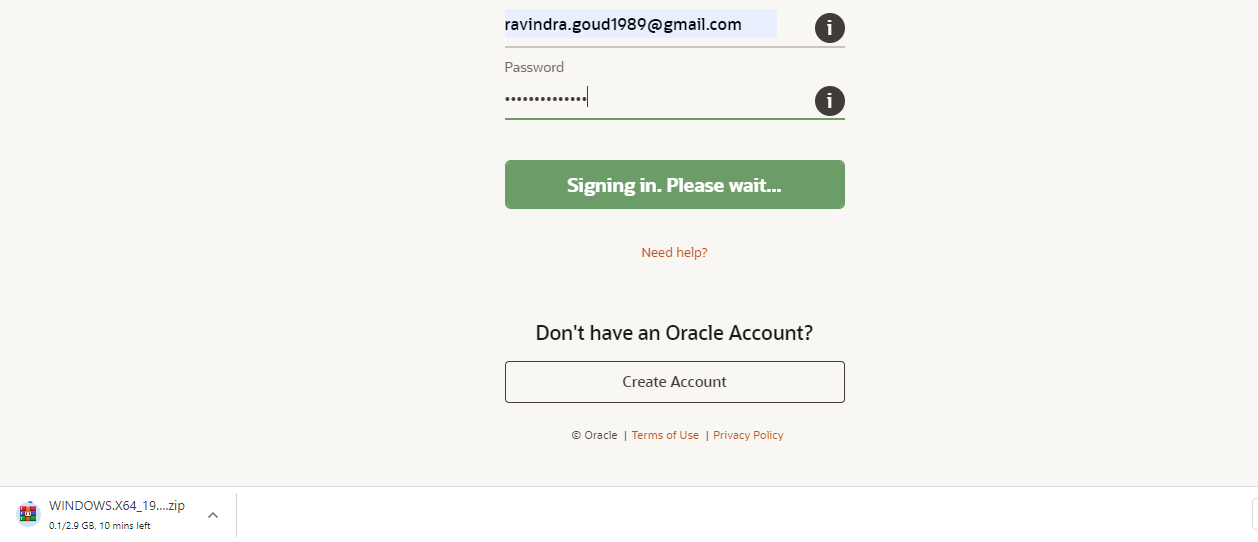


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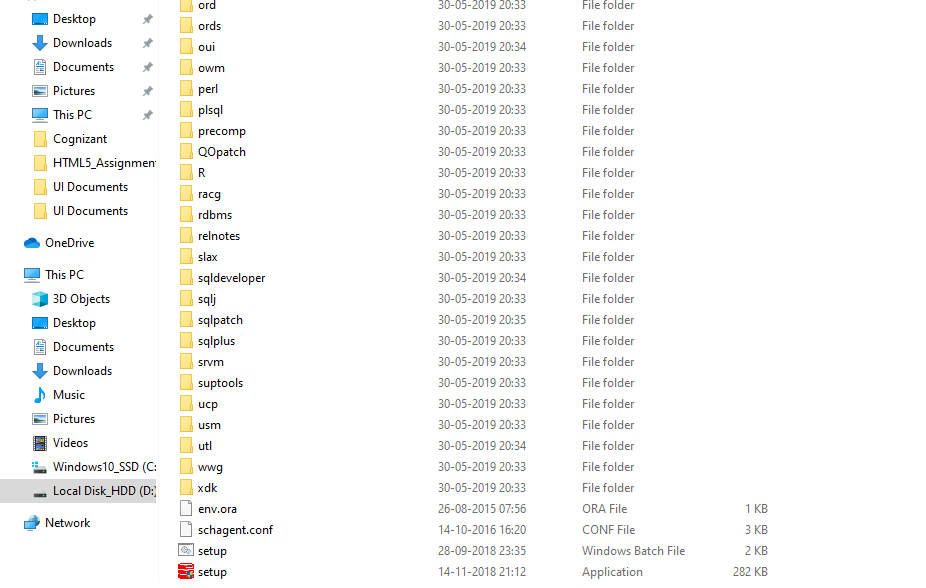
After that it will ask for oracle sign in



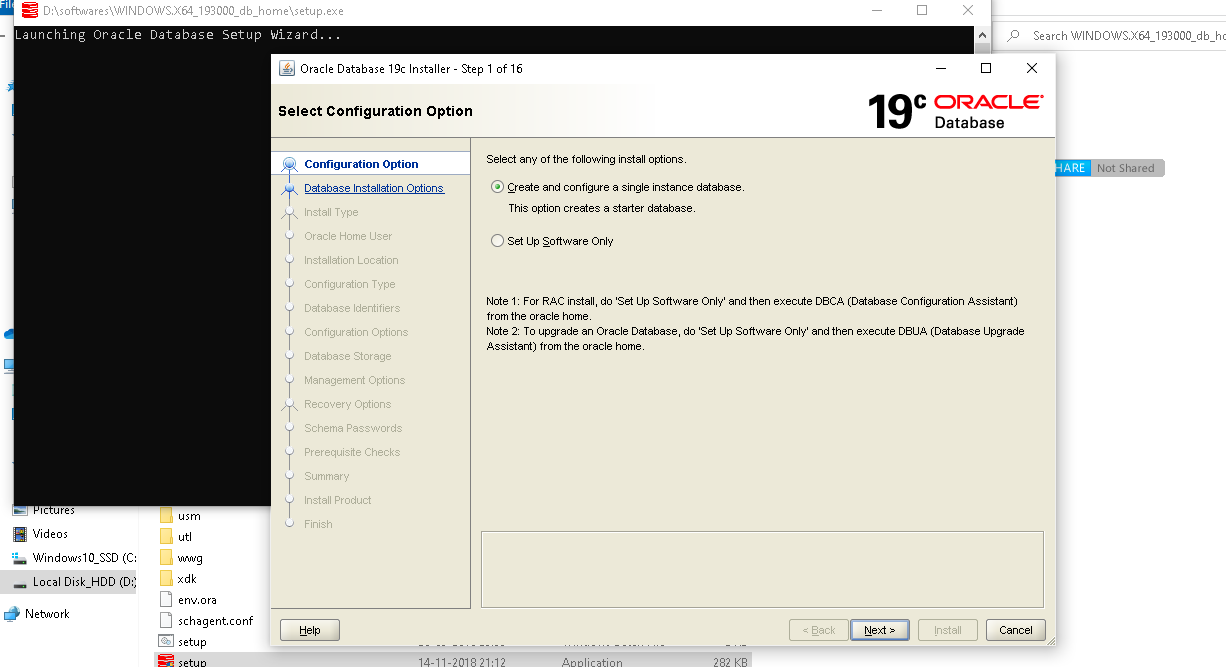
After enter the username and password it will start the download



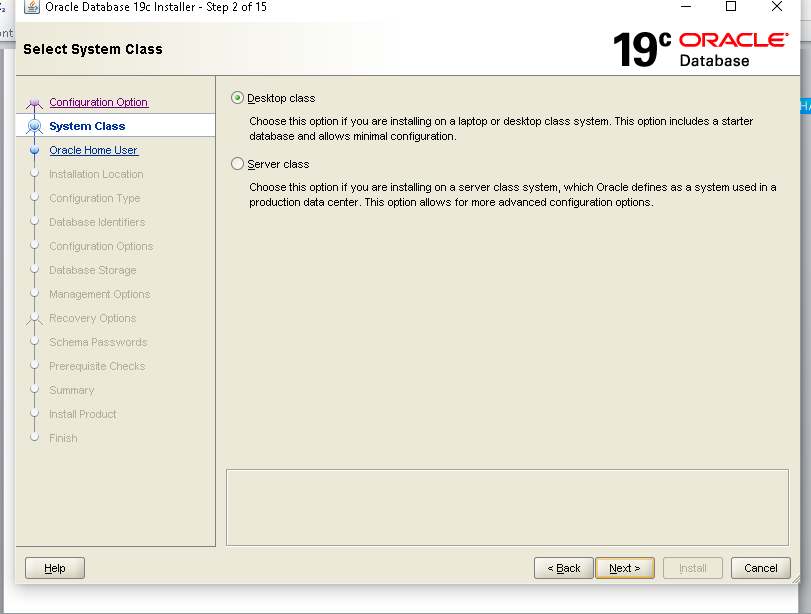
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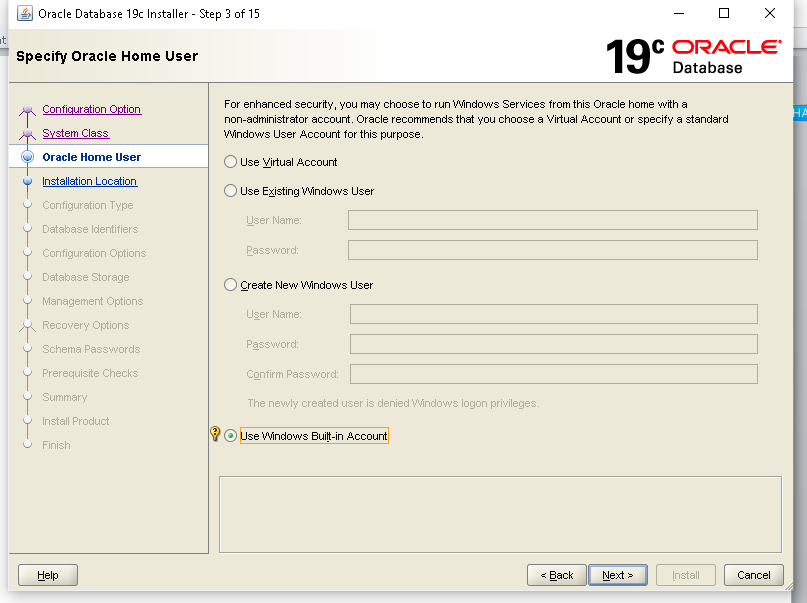
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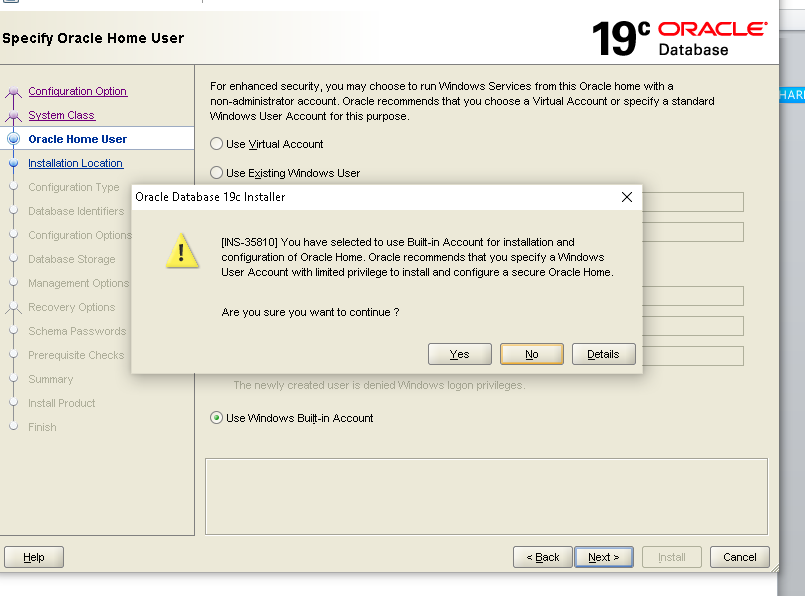
Again click on next



Below page select use window built in account



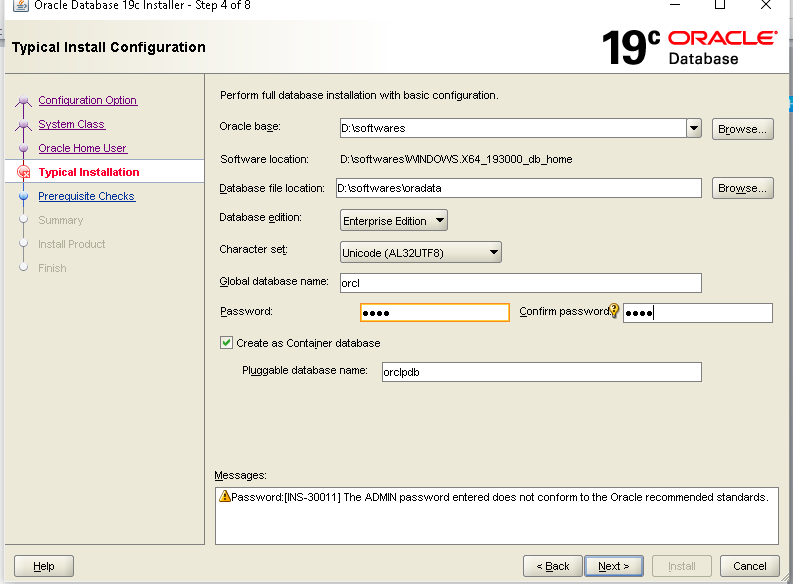
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Click on yes

In below page we have to set the password

And also note it down in some place

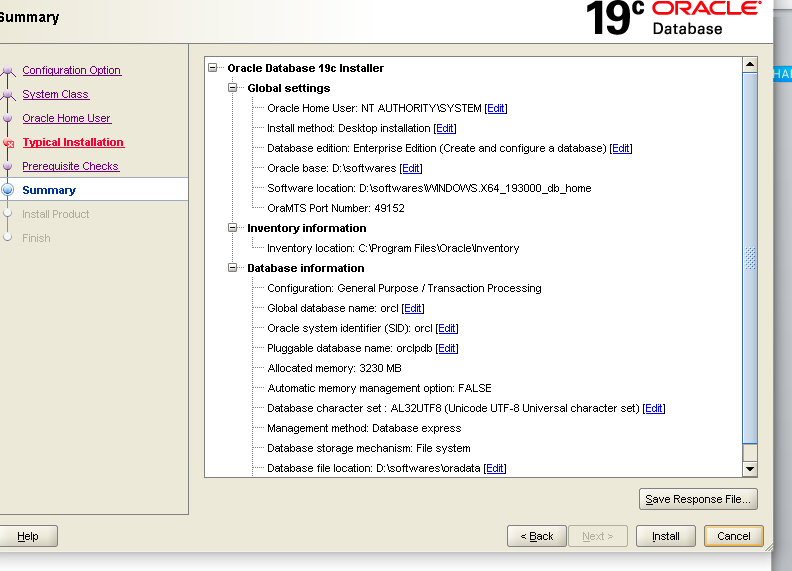


Username is:orcle

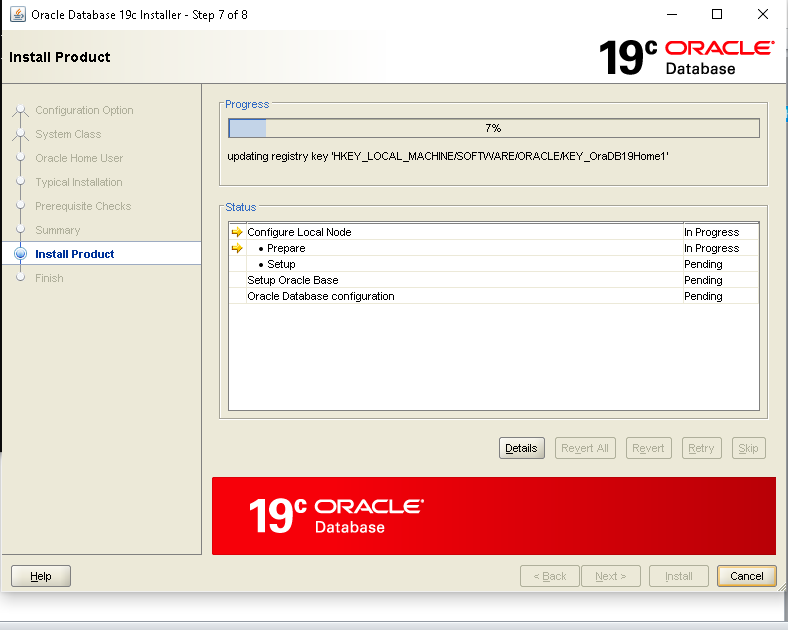
Password:Ravi@12345

Pdb:orclpdb

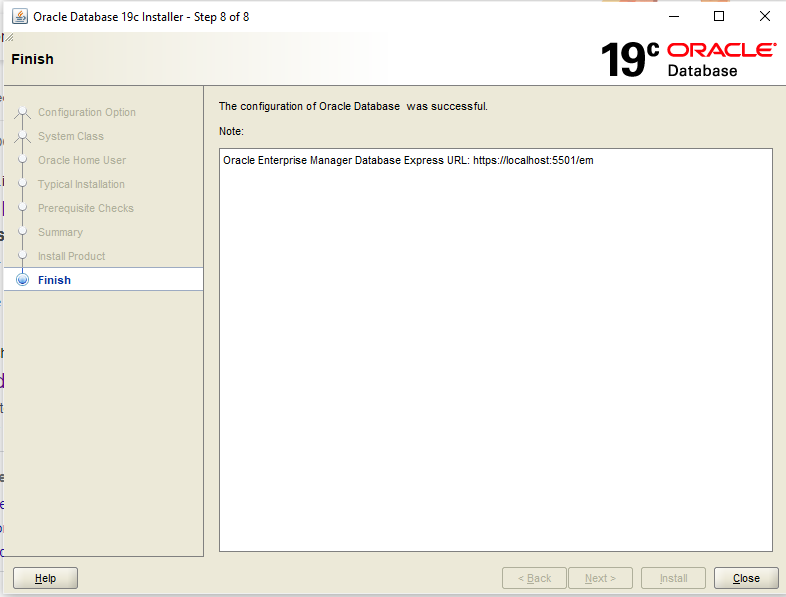
After that click on next



And click on install



After completion of installation u can see below page



And copy that url

https://localhost:5501/em

username:system

password:ur password which u have given while installing

container:keep blank

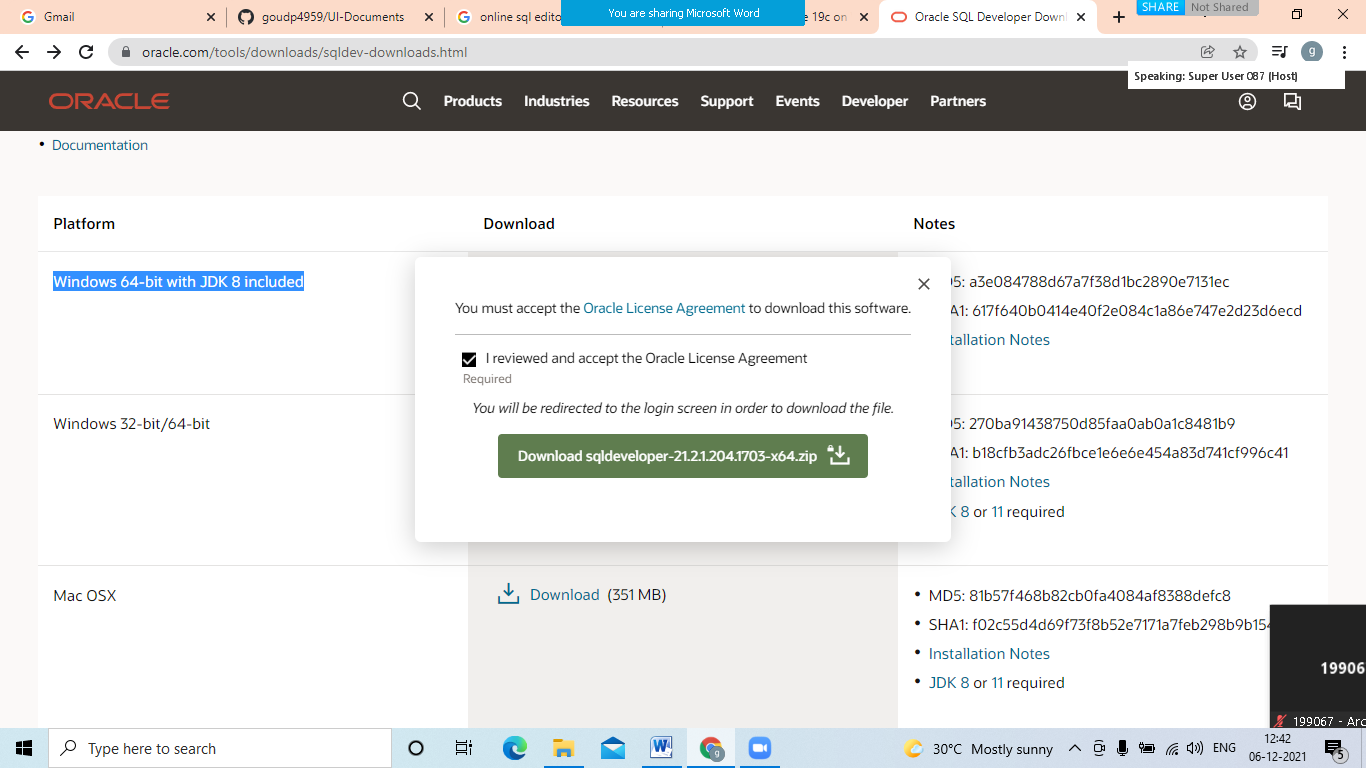
Step 2) need to install SQL Developer

Link for sql developer:

<https://www.oracle.com/tools/downloads/sqldev-downloads.html>

Windows 64-bit with JDK 8 included

Click on download



Need to check that box

Click on download sql developer

After download extract it

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