# Steps to Install Oracle XE on MacBook with M1, M2, and M3 Chips

## Step 1: Prepare Your System

1. Open the Terminal application on your Mac.
2. Ensure that Homebrew is installed on your system. If not, install it by running the following command:
```
   /bin/bash -c "$(curl -fsSL
https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```
3. Update Homebrew:
```
   brew update
```

## Step 2: Install Dependencies

1. Install essential dependencies such as Xcode Command Line Tools and other required packages:
```
   xcode-select --install
   brew install unixodbc
   brew install wget
```

## Step 3: Download Oracle Database Express Edition (XE)

1. Visit the official Oracle website to download the Oracle Database XE for Linux x86-64.
2. Alternatively, you can use the wget command to download it directly via the terminal:
```
   wget https://download.oracle.com/otn_software/linux/instantclient/instantclient-basiclite-linux.x64.zip
```

## Step 4: Install Oracle XE

1. Extract the downloaded file:
```
   unzip instantclient-basiclite-linux.x64.zip
```

```
```

2. Move the extracted directory to `/opt/oracle`:
```
sudo mkdir -p /opt/oracle
sudo mv instantclient_19_8 /opt/oracle/instantclient
```

## Step 5: Configure Oracle XE

1. Set up environment variables by adding the following lines to your `.bash_profile` or `.zshrc` file:
```
export ORACLE_HOME=/opt/oracle/instantclient
export PATH=$PATH:$ORACLE_HOME/bin
export DYLD_LIBRARY_PATH=$ORACLE_HOME
```

2. Load the new environment settings:
```
source ~/.bash_profile
```

## Step 6: Verify Installation

1. Verify that Oracle XE is installed and working correctly by running:
```
sqlplus -v
```
This should display the version of SQL*Plus, confirming that Oracle XE is installed correctly.

## Step 7: Start and Use Oracle XE

1. To start Oracle Database XE, use the command:
```
sqlplus / as sysdba
```

2. Once connected, you can start the database using the SQL command:
```
STARTUP;
```

## Step 8: Optional - Install Oracle SQL Developer

1. Oracle SQL Developer is a graphical tool for database management. To install it, download the DMG file from the Oracle website and follow the installation instructions.

2. Once installed, you can connect to your Oracle XE database using SQL Developer for easier management.