NOTE: Before you start practice, go run the drop/create script on today’s module

# Practice for Indexes:

1. Start by discussing the following questions with your partner
   1. What would be likely fields to create an index on for the invoices table based on rules discussed?
   2. Should we create an index on vendor\_id? If so why?
2. Assuming we do want to create an index on invoices.vendor\_id, write that syntax out and run it. Try to do this by reference only the syntax and not the examples. Confirm if your index was created successfully (i.e. without error).
3. Discuss if you should create an index on the invoice\_date. If so, should we consider sorting the index in a specific way? Based on your discussion, create the index you think would be most valuable.

# Practice for Sequences:

1. Create a sequence called ***member\_id\_seq*** that starts at 10 and increments by 1.
2. Copy the INSERT statements below and paste/run them in SQL Developer to test our the sequence

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| **--Test insert statements**  **INSERT INTO members**  **VALUES (member\_id\_seq.NEXTVAL , 'Clint', 'Tuttle', '1826 Easy Street', 'Tyler', 'TX', '512-123-4567');**  **INSERT INTO members**  **VALUES (member\_id\_seq.NEXTVAL , 'Michael', 'Jordan', '8391 Bulls Rd', 'Chicago', 'IL', '123-234-3455');**  **INSERT INTO members**  **VALUES (member\_id\_seq.NEXTVAL , 'Bugs', 'Bunny', '987 Looney Ln', 'Toon Town', 'NY', '');**  **Commit; --This statement will just make the insert permanent…aka save it.** |

1. After you run the test inserts above, select all rows from members to see if sequence worked. Discuss with partner

--To select all rows from the SQL statement

**Select \* from members;**

1. Now let’s make the sequence be the default value for the member\_id column.
   * First, drop the members table.
   * Then copy the DDL provided below into SQL Developer **but before you run it,** update the DDL so that the member\_id will *default* to the next value of the newly created member\_id sequence. Once DDL is updated to include this default, you should run it to recreate the table

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| **CREATE TABLE members**  **(**  **member\_id NUMBER PRIMARY KEY,**  **first\_name VARCHAR2(50) NOT NULL,**  **last\_name VARCHAR2(50) NOT NULL,**  **address VARCHAR2(50) NOT NULL,**  **city VARCHAR2(25) NOT NULL,**  **state CHAR(2) DEFAULT 'TX',**  **phone VARCHAR2(20)**  **);** |

1. Copy the test INSERT statements below and then paste/run them in SQL Developer. Note how they don’t specify the member\_id. Uses the SELECT statement from #3, see if member\_id defaults correctly

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| **INSERT INTO members (first\_name, last\_name, address, city, state, phone)**  **VALUES ('Bart', 'Simpson', '432 Kwyjibo Dr', 'Springfield', 'IL', '578-233-9876');**  **INSERT INTO members (first\_name, last\_name, address, city, state, phone)**  **VALUES ('Greg', 'Fenves', '1897 Horns Blvd', 'Austin', 'TX', '');**  **INSERT INTO members (first\_name, last\_name, address, city, state, phone)**  **VALUES ('Melissa', 'Jefferson', '987 Looney Ln', 'Toon Town', 'NY', '');**  **Commit;** |

1. Drop member\_id\_seq