**Task 3: Database Implementation.**

The following .sql file can be run as a script on Oracle DBMS to create a database based on the updated ERD from Task 1.



This file will;

* Implement the database if run on the college supplied ORACLE server.
* Create tables, sequences, indexes, views and constraints in the necessary order.



This file will;

* Populate the previously built tables using INSERT queries.

**Task 4: Database Test.**



This file tests;

* the database by answering queries 1-11 also documented in the files comments.

Diagram

Description automatically generatedUpdated Entity Relationship Diagram.

**Updates and changes.**

Changes/improvements to the Assignment ERD/Schema design

Replace "Int" type with the oracle "Number" type.

Place constraints on number of characters constraints added to tables.

Show use of the Oracle sequencing. e.g. Employee\_ID attribute.

Show use of Oracle indexing.

**Changes based on feedback from Assignment’s 1 Tasks 1+2.**

a) HD\_Operator table moved into Employee table.

b) The Computer\_SN Caller\_ID, and Call\_ID attributes do not need to be included the Equipment\_Reg table.

This is repeated data already present in the Call\_details table and means only one call could be

recorded against a piece of equipment. This was a mistake.

c) Change type VARCHAR to CHAR on primary ID's and VARCHAR2 instead of VARCHAR on other objects.

d) Call active type changed from BOOL to NUMBER type and 1 or 0 constraint check added.

**Changes to ERD:**

a) The bridging table SN\_LookUp and the Equipment\_Reg tables referred to themselves and are deadlocked. This was updated.

b) There was a mistake in the Resolution\_Codes table the attribute 'Resolution\_Codes' is not a foreign key anywhere. This has been updated.

c) Removed the Callers and the HD\_Operators tables, the Specialists\_Category\_Codes was a duplicate function with the Problem\_Category\_Codes table. Specialists\_Category\_Codes was removed.

e) Type changes from char to number.