

**Document your data cleansing issues. What were the anomalies identified and what you did to correct them?**

The original table **Uploadfile.CurrentSemesterCourseOfferings** contains an aggregate of various data that are broken down and divided between the relational tables that are created for the project.

<u>Identified Anomalies</u>	<u>Corrections</u>
The <b>column Course (hr, crd)</b> contains 3 <b>aggregated data</b> that can be broken down and divided between the Department table and Course table.	Using a similar format of <b>SUBSTRING([Course (hr, crd)], 0, CHARINDEX(' ', 0, [Course (hr, crd)]))</b> to extract the department name, hours and credits fields.
None of the original table column table had <b>no NULL values</b> . Instead there were place holder for them in the form of <b>blank spaces, dashes(-) and commas ( , )</b> , making data filter have very specific condition for each columns.	Updated the empty fields by replacing it all with 'TBA' using the <b>UPDATE</b> and <b>SET</b> query on the conditions that matches the <b>patterns associated with missing data</b> .
The original table's Instructor column contains the <b>concatenated first and last name separated by a comma ( , )</b> of that instructor which needs to be used by the Instructor table.	Used <b>RIGHT([Instructor], LEN([Instructor]) - CHARINDEX(' ', [Instructor]))</b> to extract the First Name and <b>SUBSTRING([Instructor], 0, CHARINDEX(' ', [Instructor]))</b> to extract the Last Name
The original table's Location column contains the <b>concatenated Building Name and Room Number</b> which is to be used by the BuildingLocation table and RoomLocation table.	Using the <b>SUBSTRING</b> function to extract the building name followed by the room number.
The Day column contains a <b>denormalized</b> format of multiple days, blank fields and duplicates.	Using <b>normalization</b> to summarize the days and empty fields into an atomic table.
The <b>Room Number</b> for the class is <b>not of INT value</b> since it contains a mix of INT and CHAR.	In order to <b>JOIN the ClassDetail table</b> and use the section number to filter out the result, the section number had to be <b>changed to type VARCHAR</b>
The extracted data of <b>Credits</b> from the column Course (hr, crd) is of <b>type INT</b> and <b>JOINS</b> with the other table with credit <b>as filter condition</b> .	Either <b>change the type to VARCHAR</b> or use <b>the CAST function</b> in order to compare it to the substring of the original table.

**Your naming conventions for columns, tables and schema names for separation of your SQL objects in the ERD.**

**Schema Names:**

<b>dbo</b>	o identify the tables for the database. Eg: dbo.TableName.
<b>DbSecurity</b>	to identify table related to UserAuthorization.
<b>Process</b>	to identify the tables and procedures related to Workflow which displays the state of the entire table.
<b>Uploadfile</b>	to identify the original contents of the database from QueensClassSchedule.
<b>Project3</b>	identifies the procedures that were created for this project.