

These are tasks you may like to do to gain an understanding of the ILA dataset.

### Data Exploration Tasks

1. For each column in each table, check whether there are null values
2. For each identifier column in each table, check that all values have the expected format
3. For each numerical column in each table, look at the range, distribution and measures of central tendency (mean, median) of values
4. For each categorical variable in each table, check the frequencies of each category

### Data Visualisation Tasks (Optional)

These tasks will involve joining tables

5. Produce a visualisation of how many videos there are per module
6. Produce a visualisation of how many lms items there are per module and GROUP\_LABEL
7. Produce a visualisation of how many students there are per department and module
8. Produce a visualisation of the distribution of TOTAL\_MINUTES\_DELIVERED per student across all videos within a module so that the distributions can be compared for all MODULE\_LEVEL = 5 modules in a department.
9. Produce a visualisation of the distribution of INTERACTION\_COUNT per student across all lms items within a module so that the distributions can be compared for all MODULE\_LEVEL = 5 modules in a department.