Day 1

- Viewing data : To view sample of data use the Results window at bottom right (make sure to select Data in the cell viewer and not Metadata)

- To view entire data from a tool in the Results window, add a Browse tool, and rerun the workflow (use this when you see Memory Limit Reached.Use a Browse Tool to view full results)

- To refer to a column in a formula, wrap the column name in square brackets

- To split a string field into multiple columns based on a delimiter, use the Text to Column tool in the Parse pane

- To change the type of field from string to integer use Formula tool in Preparation pane. In that create new Field with expression : ToNumber([StringField])

- To create new rows between columns Start Year and End year use Generate Rows tool in Preparation, such that
        - Intialization Expression : [Start Year]
        - Condition Expression : Year <= [End Year]
        - Loop expression : Year + 1

- To group by one or more field we use the Summarize tool in the Transform pane, where we can add the group by fields as well as the fields we want to aggregate. The Summarize tool provides multiple types of aggregations like count, count distinct, min, max, etc

- The Alteryx join tool gives 3 outputs
        - L anchor : records from the L input that didn't join to records from the R input.
        - J anchor : records that joined from the L input to the records in the R input.
        - R anchor : records from the R input that didn't join to records from the L input.

- To do a Left Outer Join bw 2 tables, connect the J and L outputs of the Join tool to the Union tool.

- Alteryx Multi-threaded Processing (AMP) is a new architecture of the Alteryx engine. As the name implies, AMP is a multi-threaded concept that processes data in parallel packets. In contrast, the original engine architecture processes data record-by-record sequentially to run a workflow.

Errors
-Invalid type in operator <= when trying to use column name
Error: Generate Rows (37): The formula resulted in a string but the field is numeric. Use ToNumber(...) if this is correct. (Initialization Expression)

Doubts
1. How to preview result of each operation?
2. How to convert string field to integer field with same name?
3. How to do a left outer or right outer join directly in Alteryx? (directly not possible, need join tool + union)
4. Can we split a field using the Text to Column tool, can we name the new fields in the same tool?
5. How to sort the result by a particular column similar to order by in sql?

References
1. https://community.alteryx.com/t5/Alteryx-Designer-Desktop-Discussions/Converting-a-string-into-a-number/td-p/8106
2. https://help.alteryx.com/current/en/designer/tools/join/join-tool.html
3. https://help.alteryx.com/current/en/designer/workflows/alteryx-amp-engine.html#idp321526