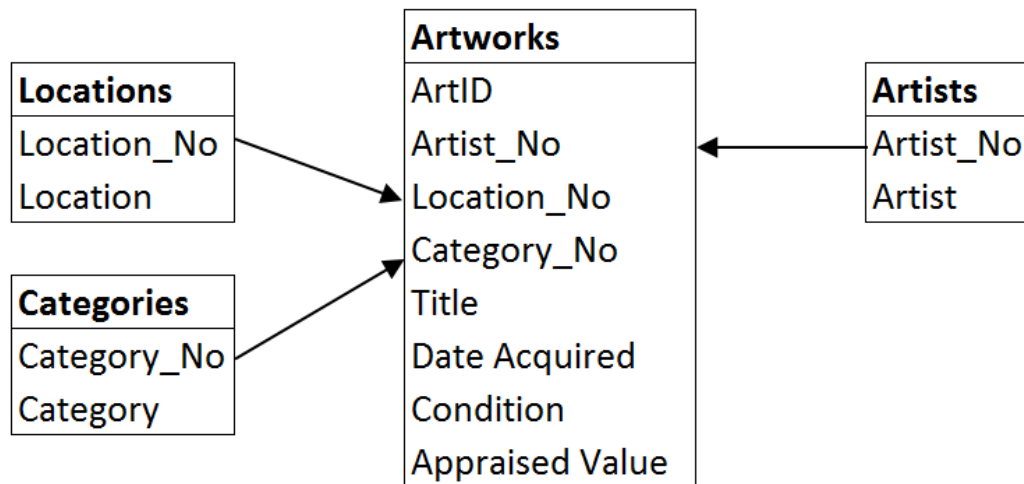




Case 2 Dataset Analysis with ETL

1. Business Scenario

You are to build a simple ETL process for the Art Database. The output of this process is a MS Excel Spreadsheet that will be used for additional descriptive analysis. The Art Database is composed of the following tables and relationships.



2. Instructions:

- Extract the following data from the SQLite database using R commands. The final desired data in excel format should have the following columns: Save the data frame as “art.csv”

	A	B	C	D	E	F	G	H	I
1	ArtID	Artist	Title	Date Acquired	Category	Condition	Location	Appraised Value	Age
2	1	Mogan	Red Rock I	3/19/2005	Painting	Excellent	East Pavili	\$ 18,000	10.43
3	2	Novarre	Offerings	5/16/2005	Painting	Excellent	East Pavili	\$ 10,000	10.27
4	3	Chico	Spring Flo	3/20/2004	Sculpture	Excellent	East Pavili	\$ 2,400	11.43

- Dataset Description:** One row for each artwork with corresponding artist name, category description, condition, its location appraised value and age as of today in years.
- Using R Commands, answer the following business questions:
 - Calculate the Mean, Standard Deviation, Median, Mode, Variance, Range, Minimum, Maximum, Sum and Count of the Appraised Value of all Artworks in USD.
 - Calculate the average and as well as the total value and number of Artworks for each location in the Museum. Which location is the most/least valuable?
 - Calculate the average and as well as the total value and number of Artworks for each Artist in the Museum. Which Artist has the highest average value per painting?
 - Given the date acquired, what is the average age of the paintings in years per condition per location today?
 - Is there a relationship between the average age and its condition?