**Task – 2**

**Manual Feature Engineering vs Feature Tools**

**Manual Feature Engineering:**

* Domain knowledge, intuition and data manipulation was very much required
* More time taking
* Finding out features for the target variable (interest rate) was very complex
* Required more brainstorming and extensive data exploration

**Feature Tools:**

* Automatically creates features based on the method of Deep feature synthesis
* Need to provide clean data without missing values or NaN
* Can create Entityset (contains multiple dataframes and relationships)
* Takes less time and creates multiple features

**Summary:** Overall feature tools was equally challenging to implement as it required clean dataset. But it didn’t need much of domain knowledge to implement it. Manual feature engineering could be performed without clean data but needed to have some domain knowledge to predict relevant features to the target variable

