**Approach:**

* The problem contains one dependent variable “engagement\_score” and other remaining independent variables.
* As the independent variables are more, I decided to use Multiple linear regression and Random Forest regression.
* Before using the data for modelling first the data needs to be modified/processed a little, Null data check was done.
* The categorical columns of profession and gender needs to be encoded into numeric form as the model requires numeric data to work efficiently.
* Here use of ColumnTransformer with OneHotEncoder provided the desired output.
* Now the data can be used in building the model, first the splitting of training data into train and test is required which afterwards can be used in both the selected models
* After building and predicting the test output using test data on both models, the Random Forest model gave better R2 score.

Linear Regression: 0.2823584367242876

Random Forest: 0.36131782789614086

Thus, Random Forest model is used for predicting the final test data.