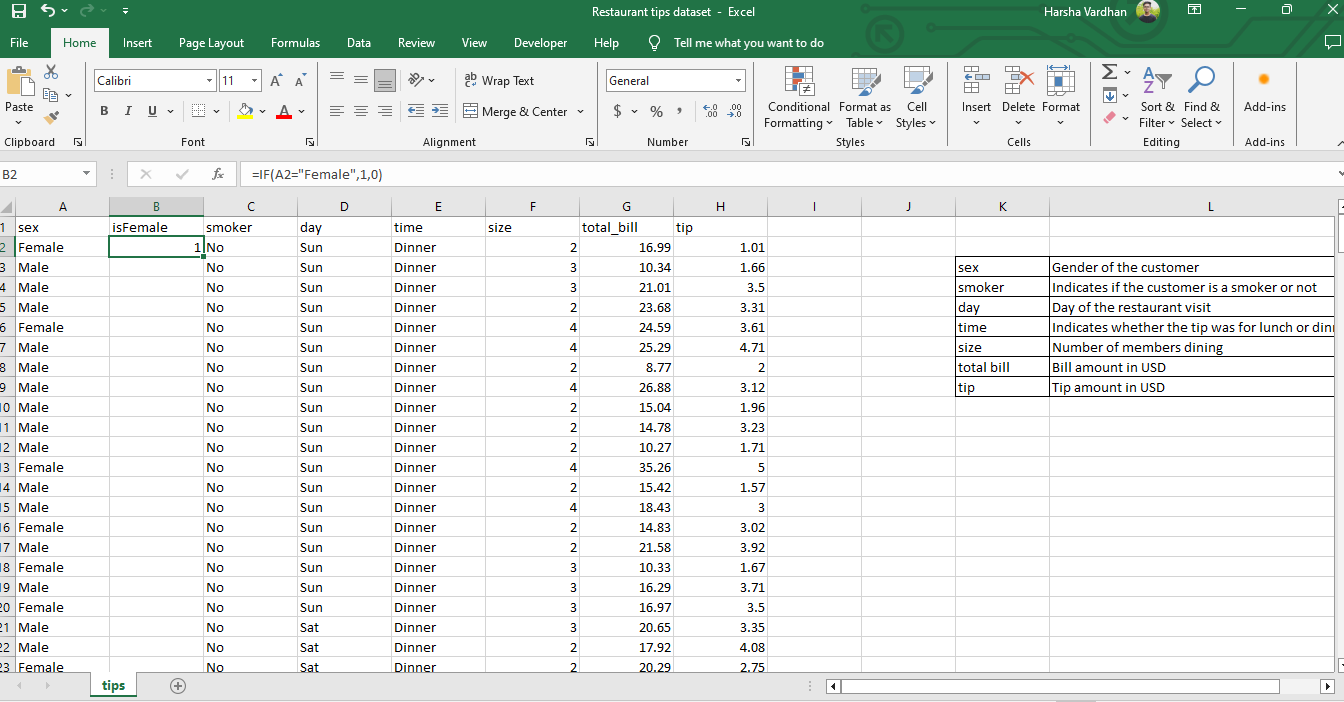
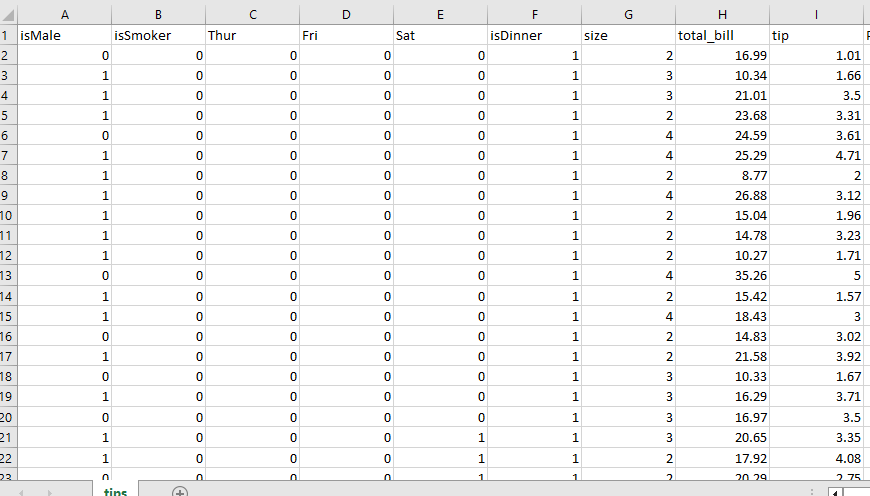
**1.Encode the categorical variables to numeric values using IF condition.**



Use IF Condition as =**IF(A2=”Female”,1,0)**

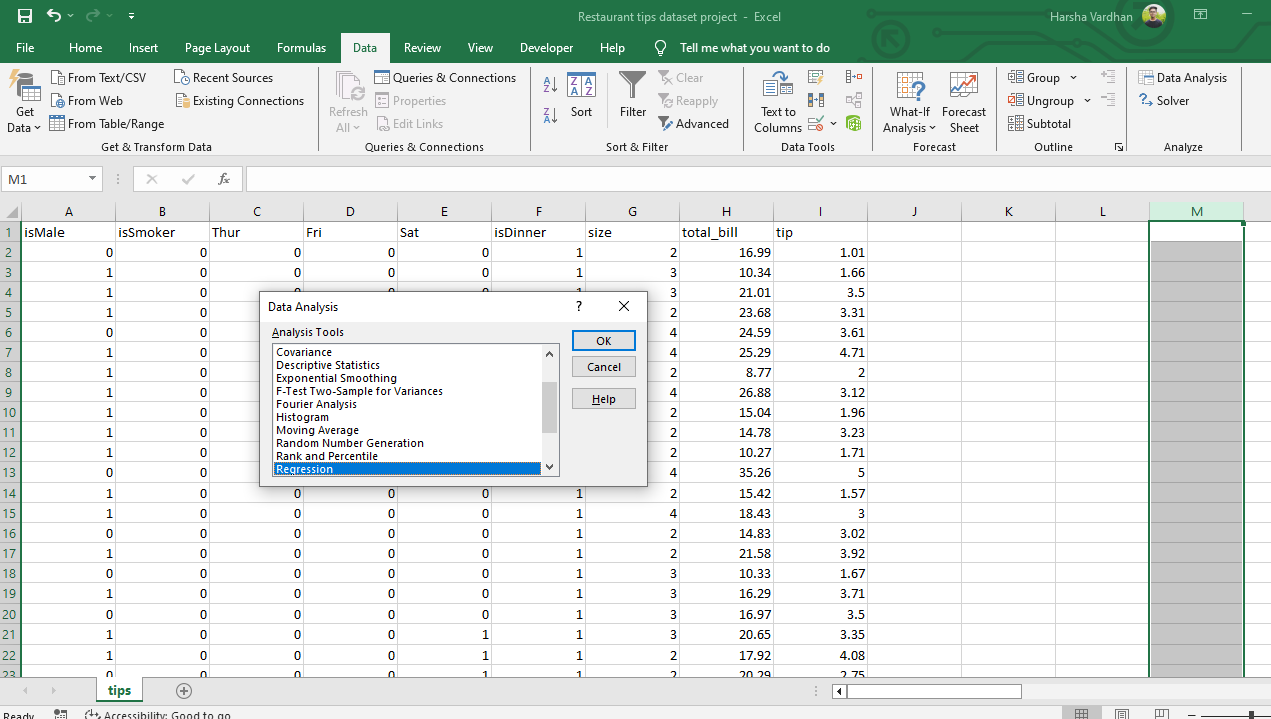
Complete this step for all the headers until time header

After completing excel sheet will look as the below Screenshot

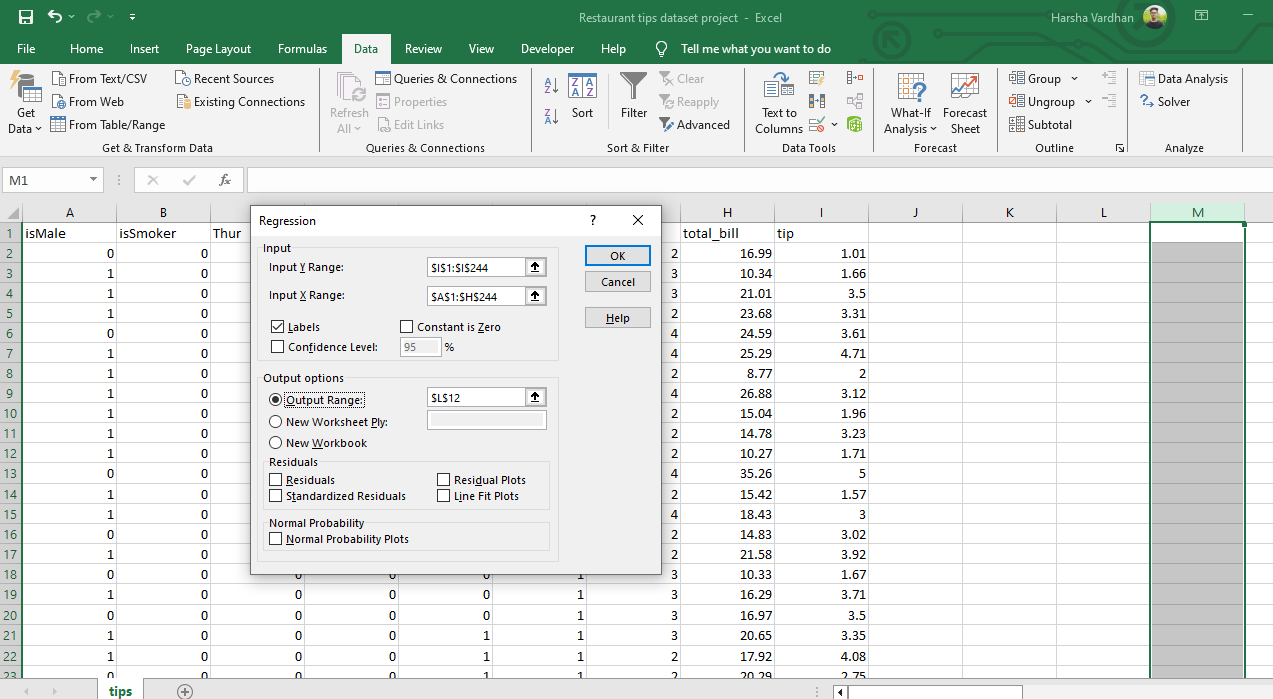


**2.Build an appropriate model**

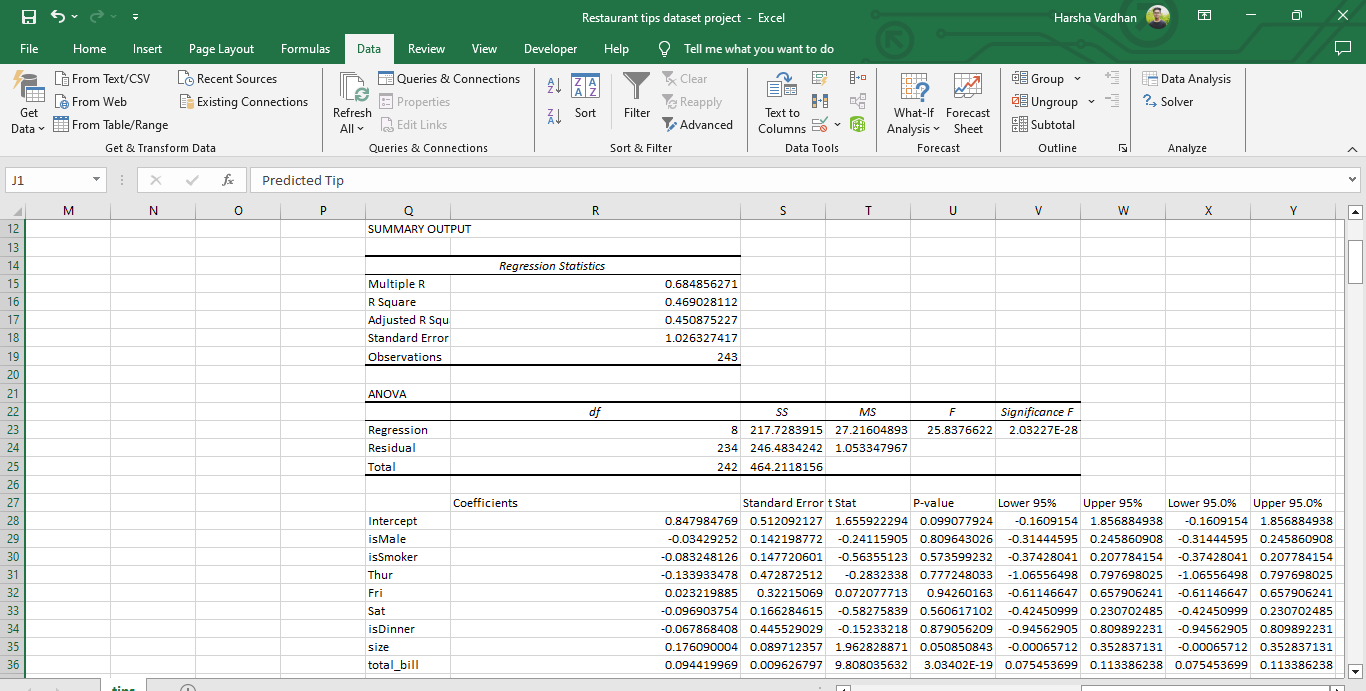
To do it click on Data -> Data Analysis and then click on Regression



Select input and output Range as shown below



You will get Summary output as follows

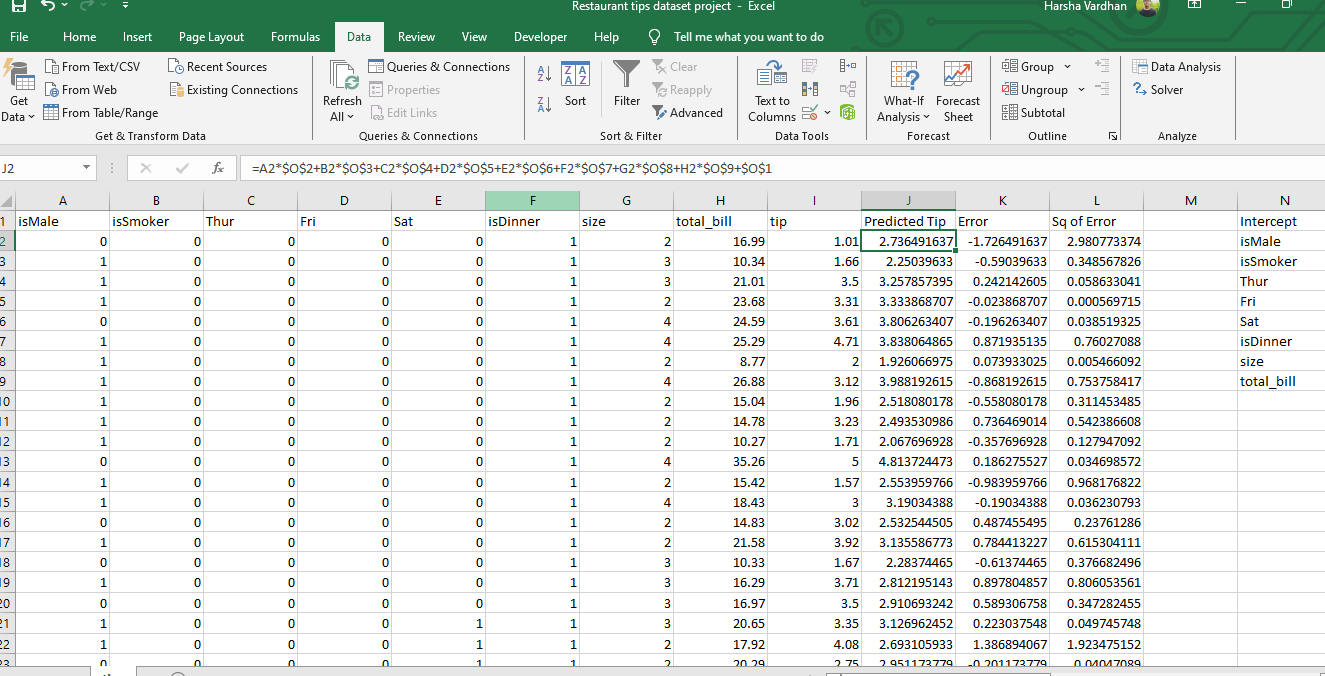


**3.Calculate Predicted and Actual tip**

To create predicted tip select all the conflicts and use the below formula to calculate Predicted

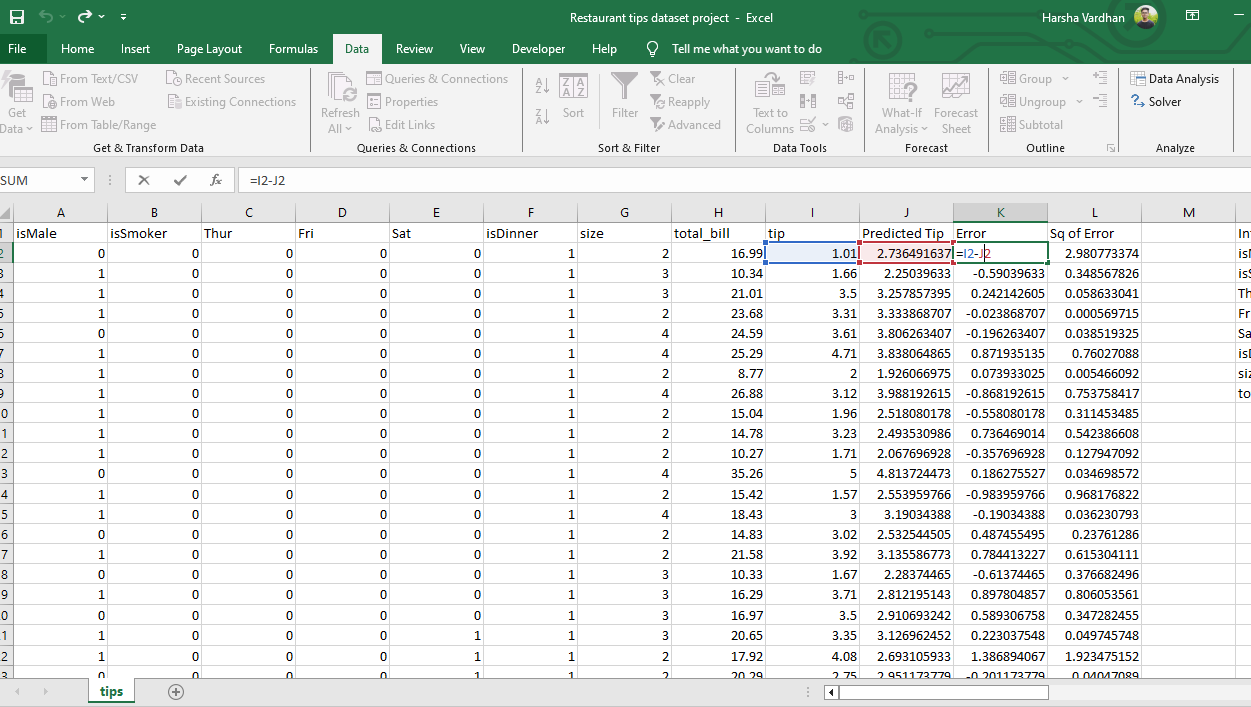
**Formula is =A2\*$O$2+B2\*$O$3+C2\*$O$4+D2\*$O$5+E2\*$O$6+F2\*$O$7+G2\*$O$8+H2\*$O$9+$O$1**

Output will be as below screenshot

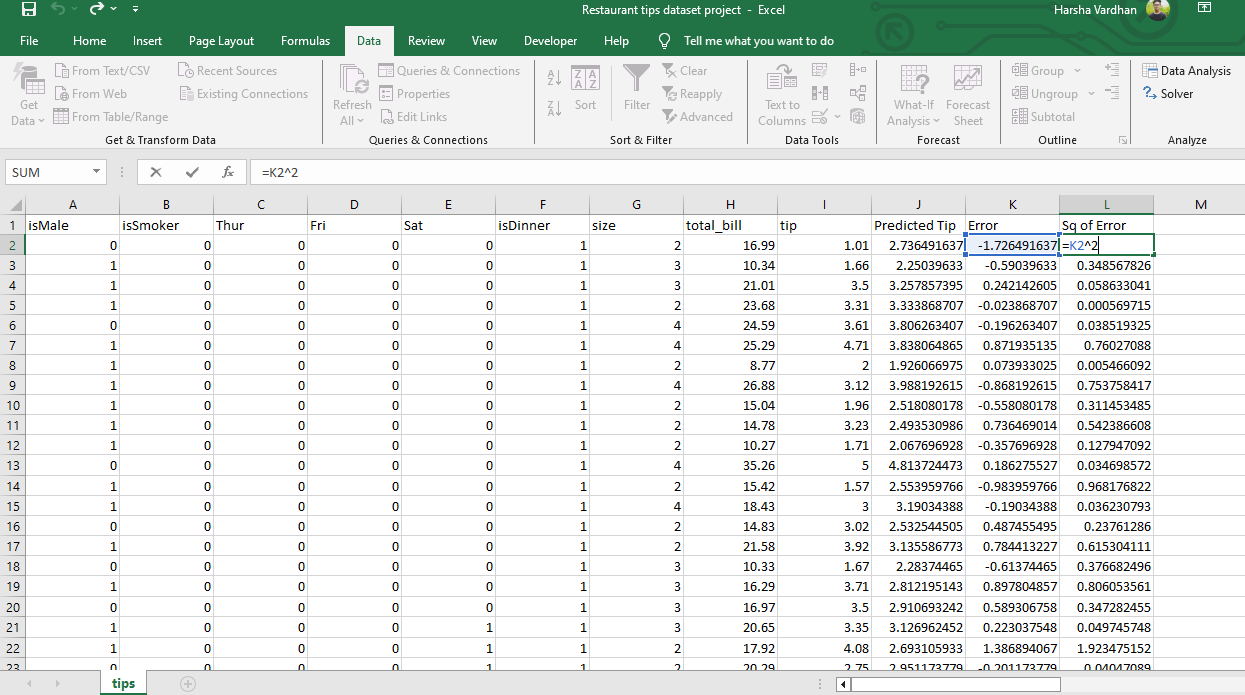


Then Calculate Actual tip with formula as

**Actual tip = Predicted tip – Tip** and the output is as shown below



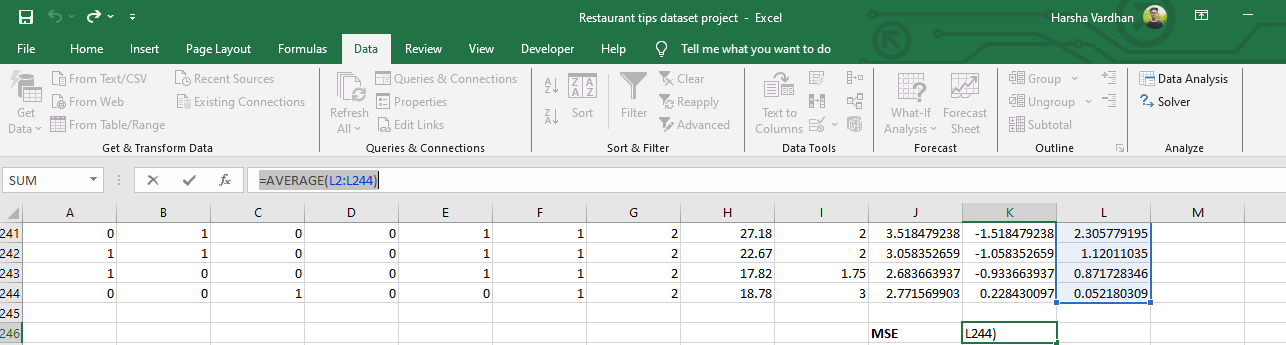
Then Calculate Square root of error with formula as **Error^2**



**4. Calculate RMSE (Root Mean Square Root) :**

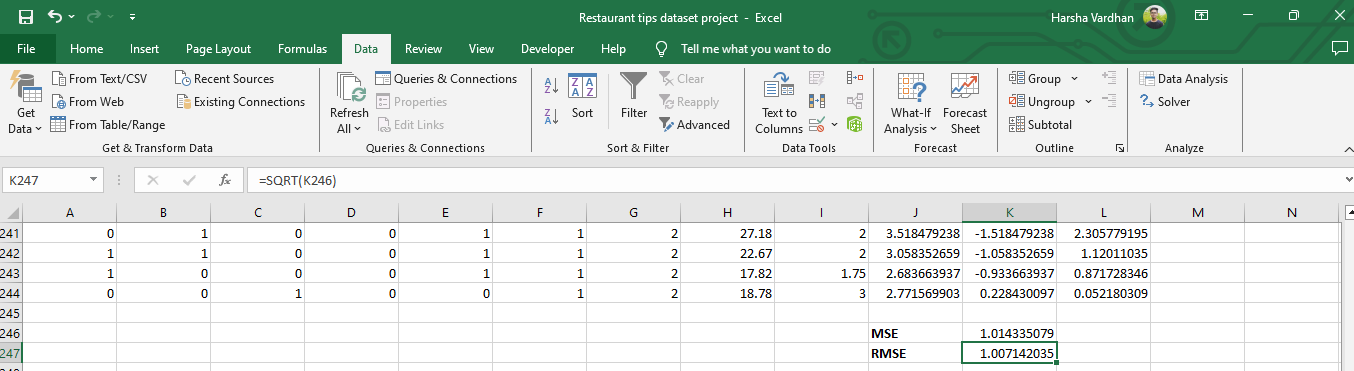
First calculate Mean Square root by taking the average of Sq of Error in L coloums

Formula as **MSE=AVERAGE(L2:L244)**



Now Calculate RMSE which is Square root of MSE

**RMSE = SQRT(K246)**



**RMSE is Calculated**