(A.) African Mobile Data:

You are a Business Analyst brought in by African Mobile, a mobile company that aggressively expanded across the entire continent of Africa beginning in 2013. Business has been humming along for the past four years, and they would like you to conduct a profitability analysis of their business. This will involve looking at not only profitability, but also Salesperson performance. African Mobile has requested the following:

1. An interactive dashboard showing Profit by City, tied to Profit by Segment and a Profit Trend. African Mobile should be able to select a City and see the other charts adjust.

2. An interactive scatterplot showing the relationship between Profit and Sales by Region, Country, or City, depending on their choice.

3. An interactive Salesperson analysis showing Contracts Sold by each person, as well as a second chart showing difference from a selected Salesperson.

4. A two-way matrix, over time, tracking Salesperson quarterly performance against benchmarks (in parentheses) for Contracts Sold (10) and Close Rate (30%).

5. African Mobile has long experience with Tableau and is not easily impressed. Cap your workbook off with a Sankey Chart showing how Sales flow between Segment and Region.

Note: Use either R or any BI/Data Analysis tool of your choice.

(B.) Sample Data:

From the sheet "Booth details" see the column named "Booth Name" and from sheet "Census details" see the column named "Village". For analyzing data at booth level it is required to map booth name to village. Many names are spelled same by both census and election commission but some names might be differently spelled. For mapping data at large scale, we need to develop a string matching algorithm so that this can reduce a lot of manual effort.

For task three write two algorithms for mapping of booth name to villages.

1. Phonetics Algorithm

2. Fuzzy Algorithm at 95% Accuracy

For these two algorithms put the mapped village name in the last two columns of sheet "Booth Details".

As a part of this case study, the deliverable will be:

* The output at the specified sheets and columns
* The R/Python Code