1. Ability to visualize and analyse datasets using Tableau.

Tableau Practical Assignment

Context

Each row in CPR.csv corresponds to University data for a given academic year. Assume that this data was collected by the United States Department of Education over 10 academic years (2010 – 2019) to better understand the variability in higher education completion rate (CPR) across 120 Universities, and the factors influencing the completion rate.

Relevant information about data variables is given below:

YEAR: Academic year

INSTNM: Institute name

CITY, STATE, COUNTRY: City, State where University is located in United States

INST\_TYPE: Type of Institution – Public or Private

NT\_TUT\_REV: Net Tuition Revenue per student ($)

INST\_EXP: Instructional expenditure per student ($)

AVG\_FAC\_SAL: Average faculty salary per month ($)

TS: Total students enrolled in the academic year

TS\_MEN: Percentage of total students enrolled - Men

TS\_WOM: Percentage of total students enrolled - Women

TS\_MAR: Percentage of total students enrolled - married

TS\_DPEN: Percentage of total students enrolled - dependent

TS\_VET: Percentage of total students enrolled - veteran

TS\_PT: Percentage of total students who study part time

ST\_FI\_LO: Percentage of students whose family income is in the range $0-$30,000

ST\_FI\_M1: Percentage of students whose family income is in the range $30,001-$48,000

ST\_FI\_M2: Percentage of students whose family income is in the range $48,001-$75,000

ST\_FI\_H1: Percentage of students whose family income is in the range $75,001-$110,000

ST\_FI\_H2: Percentage of students whose family income is $110,001+

HL\_ED\_MS: Percentage of students whose parents’ highest level of education is middle school

HL\_ED\_HS: Percentage of students whose parents’ highest level of education is high school HL\_ED\_PS: Percentage of students whose parents’ highest level of education is postsecondary education

CPR: Higher education completion rate for full-time, first-time students (refers to percentage of students who complete their education and graduate)

Task

As a Data Analyst working for the Department of Education, you are required to create the following data visualizations:

1. A visualization (preferably a map) that shows TS and CPR for all 120 Universities.
2. A visualization that answers the following questions:

* Is there a relationship between INST\_EXP and CPR?
* Is there a relationship between AVG\_FAC\_SAL and CPR?
* Is there a relationship between gender ratio and CPR?
* Is there a relationship between TS\_PT and CPR?

You are required to demonstrate an application of string parameters in this visualization.

1. 3. A visualization that explores the relationship between student cohort’s family income and CPR.

1. A visualization that explores the relationship between student cohort’s parents’ education and CPR.

1. 5. A visualization that provides comparative CPR analysis among top 10 universities with highest completion rates

All visualizations should be filterable by academic year. Visualizations 1,2,3, and 4 should also be filterable by INST\_TYPE.

Finally, prepare two dashboards that could be used as presentation slides for the purpose of

presenting insights to the management. In these 2 dashboards, you should explain any two

interesting insights gleaned from the above visualizations.