**Stat-7020: Statistical Computing**

**Final Project-Part: A**

The dataset "Students" has 105 observations which were randomly sampled from the High School to help the teachers to make a prediction of what **makes a brilliant student** whether he can apply for a graduate school, whether abroad or not and to help those who fails to apply for a graduate school with advice in job searching. This dataset contains the following variables Id, Class, Gender, Race, GPA, Algebra, Calculus, Statistics, Probability, Y. The aim of the report is to advise the students whether they can pursue their education abroad or not according to the scores they achieved.

In this analysis, the quantitative variables will be examined to understand the distribution of scores among the students, allowing for insights into academic strengths and weaknesses across subject areas. Additionally, categorical variables will be explored to identify any patterns or disparities in academic outcomes based on scores that the students have achieved. Understanding these relationships can contribute valuable information to teachers to let the students pursue and helping them to be on the right path.

To justify the analysis and variable selections, references such as the original documentation of the student’s dataset, relevant education research literature, and statistical methods textbooks will be consulted**.** The report aims to contribute meaningful insights to the lecturers about the student performance and the career path that they can choose.