**Written Report on pyCitySchools challenge**

Summary:

\* This analysis was done to aggregate the data to showcase trends in school performance. A dataset was provided which contains the details of each school considered for the analysis. The key metrics for the analysis were school type, total students, total school budget, per student budget, average maths score, average reading score, percentage of students who passed maths, percentage of students who passed reading and overall percentage of students who passed both maths and reading.

\* Initially a Local Government Area summary data frame was created to identify the area’s key metrics.

\* Next, a per school summary data frame was created to identify the key metrics about each school.

\* Then the top 5 and bottom 5 performing schools were identified based on overall passing percentage.

\* The year wise average maths and reading scores were calculated for each school for each year – 9, 10, 11 and 12.

\*  Data frames were created to break down school performance based on average spending ranges (per student), school size and school type.

Conclusion:

The following two conclusions were drawn from the calculations

1) Higher the school size, the overall passing percentage was decreasing. This indicates that the schools with less than 1000 or 1000 – 2000 students are able to give students more attention and have a better overall passing percentage.

2) The Independent school type has a higher overall passing percentage when compared to the Government school type. It can be observed that all the Independent schools also have a size of less than 2000 students which can be a factor for the higher overall passing percentage.